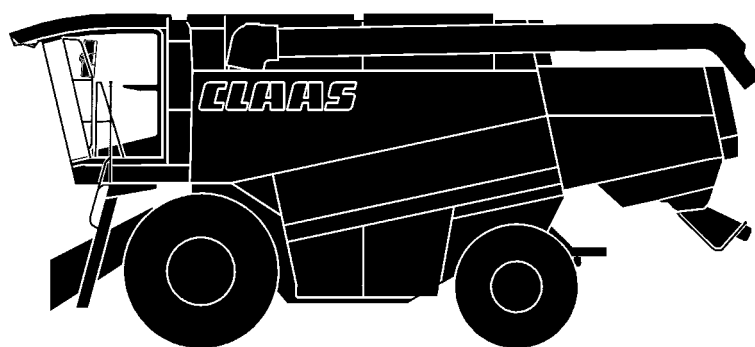


REPAIR MANUAL

CLAAS



LEXION 460 / 450 / 440

LEXION 430 / 420 / 415

LEXION 410 / 405

Read and follow safety instructions!

CONTENTS**1. General information**

General	1.1.1
Introduction	1.1.1
Introduction to the CLAAS Repair Manual	1.1.2
Key to symbols	1.1.3
Safety Rules	1.2.1
Important notice	1.2.1
Identification of warning and danger signs	1.2.2
Correct use of the machine	1.2.2
General safety and accident prevention regulations	1.2.2
Leaving the machine	1.2.3
Compressor-type air conditioner	1.2.3
Maintenance	1.2.3
Basic rule	1.2.3
Pressure accumulator	1.2.3
General repair information	1.3.1
Reason of damage	1.3.1
Spare parts	1.3.1
Engine	1.3.1
Gearboxes	1.3.1
Alternator	1.3.1
Tensioning the steel roller chains	1.3.1
Taper ring fasteners	1.3.1
Self-locking bolts	1.3.1
Liquid locking compound	1.3.2
Correct installation of lock collar bearings	1.3.2
Correct installation of adapter sleeve bearings	1.3.2
Ferrule fittings on hydraulic lines	1.3.2
Progressive ring fittings on hydraulic lines	1.3.3
Taper fittings on hydraulic lines	1.3.3
Welding	1.3.3
Some advice for speedy and correct repair work	1.3.4
Tightening torques	1.4.1
Bolts	1.4.1
Hydraulic fittings	1.4.2
Brake line screw joints	1.4.3
Wheel bolts	1.4.4
Safety features	1.4.4
Specifications	1.5.1
Lubricants chart	1.5.1
Hydraulic pressure values	1.5.2
Sectional view of machine	1.6.1
Drive diagram	1.7.1
Drive diagram, left-hand	1.7.1
Drive system diagram, right-hand side	1.7.2

2. Operator's platform

Air conditioner	2.1.1
Important instructions regarding the compressor-type air conditioning system	2.1.1
Important instructions regarding the installation of parts in the compressor-type air conditioner	2.1.2
Air conditioning system – Topping up refrigerant	2.1.3

Checking / topping up the refrigerant oil level at the air conditioner compressor	2.1.4
Topping up refrigerant oil	2.1.5
Removing the condenser	2.1.5
Refitting the condenser	2.1.6
Removing the air conditioner compressor	2.1.7
Installing the air conditioner compressor	2.1.8
Removing the air conditioner compressor electro-magnetic clutch	2.1.8
Air conditioner compressor Sanden Sd 7h 15, disassembled	2.1.12
Installing the air conditioner compressor electro-magnetic clutch	2.1.13
Removing the air conditioner compressor cylinder head / cylinder head gasket	2.1.15
Installing the air conditioner compressor cylinder head / cylinder head gasket	2.1.16
Removing the air conditioner compressor shaft seal	2.1.17
Installing the air conditioner compressor shaft seal	2.1.19
Removing the expansion valve	2.1.20
Air conditioning system (cab side), disassembled	2.1.22
Installing the expansion valve	2.1.23
Removing the thermostat	2.1.23
Installing the thermostat	2.1.25
Removing the evaporator	2.1.26
Installing the evaporator	2.1.27
Removing the filter receiver drier	2.1.29
Filter receiver drier, disassembled	2.1.30
Installing the filter receiver drier	2.1.30
Steering	2.2.1
Scenes of failures on the Orbitrol steering unit	2.2.1
External leaks	2.2.1
Internal leaks	2.2.1
Removing the steering column	2.2.2
Disassembling the steering column	2.2.4
Steering column, disassembled	2.2.7
Assembling the steering column	2.2.8
Installing the steering column	2.2.9
Removing the valve block from the Orbitrol	2.2.11
Installing the valve block on the Orbitrol	2.2.12
Removing the Orbitrol	2.2.14
Orbitrol, disassembled	2.2.14
Installing the Orbitrol	2.2.15
Parking brake	2.3.1
Removing the parking brake	2.3.1
Installing the parking brake	2.3.2
Foot brake	2.4.1
Removing the master brake cylinder	2.4.1
Master brake cylinder, disassembled	2.4.1
Assembling the master brake cylinder	2.4.1
Installing the master brake cylinder	2.4.2
Adjusting the master brake cylinder	2.4.2
Engine electric system	2.5.1
Alternator	2.5.1

3. Threshing mechanism

Feed rake conveyor 3.1.1
 Removing the feed rake conveyor 3.1.1
 Installing the feed rake conveyor 3.1.3
 Removing the intercepting piece 3.1.4
 Installing the intercepting piece 3.1.4
 Removing the feed rake conveyor
 suction blower 3.1.5
 Disassembling the feed rake conveyor
 suction blower 3.1.5
 Feed rake conveyor suction blower,
 disassembled 3.1.7
 Assembling the feed rake conveyor
 suction blower 3.1.8
 Installing the feed rake conveyor
 suction blower 3.1.9
 Removing the top feed rake shaft 3.1.9
 Feed rake top shaft, disassembled
 LEXION 460 – 440 3.1.15
 Feed rake top shaft, disassembled
 LEXION 430 – 405 3.1.16
 Installing the feed rake top shaft 3.1.17
 Removing the bottom feed rake roller 3.1.22
 Bottom feed rake roller, disassembled
 LEXION 460 – 440 3.1.24
 Bottom feed rake roller, disassembled
 LEXION 430 – 405 3.1.24
 Assembling the bottom feed rake roller 3.1.24
 Installing the bottom feed rake roller 3.1.25
 Replacing the wooden ledges 3.1.26
 Removing the intermediate floor 3.1.26
 Installing the intermediate floor 3.1.28
 Replacing the runners 3.1.29
 Removing the intermediate drive shaft 3.1.29
 Intermediate drive shaft, disassembled 3.1.34
 Installing the intermediate drive shaft 3.1.35
 Removing the reverser drive 3.1.36
 Reverser drive, disassembled 3.1.38
 Installing the reverser drive 3.1.39
 Replacing the feeder chains 3.1.39
 Threshing concave 3.2.1
 Removing the stone trap 3.2.1
 Installing the stone trap 3.2.1
 Removing the preconcave 3.2.2
 Preconcave, disassembled 3.2.5
 Installing the preconcave 3.2.6
 Removing the main concave 3.2.7
 Main concave, disassembled 3.2.9
 Installing the main concave 3.2.11
 Basic concave setting 3.2.15
 Adjusting the concave potentiometer 3.2.20
 Learning the limit stops 3.2.20
 Learning the limit stops 3.2.21
 Accelerator 3.3.1
 Removing the bearing assembly and
 the shaft on the right-hand side 3.3.1
 Disassembling the right-hand bearing assembly 3.3.3
 Assembling the right-hand bearing 3.3.3

Installing the right-hand bearing assembly
 and shaft 3.3.5
 Removing the bearing assembly on
 the left-hand side 3.3.8
 Disassembling the left-hand bearing assembly 3.3.10
 Assembling the left-hand bearing assembly 3.3.11
 Installing the left-hand bearing assembly 3.3.12
 Replacing the accelerator caps 3.3.13
 Removing the accelerator 3.3.14
 Accelerator, disassembled 3.3.17
 Installing the accelerator 3.3.18
 Threshing drum 3.4.1
 Removing the right-hand drum
 bearing assembly 3.4.1
 Disassembling the right-hand drum bearing 3.4.3
 Right-hand drum bearing, disassembled 3.4.4
 Installing the right-hand drum bearing 3.4.5
 Removing the left-hand drum bearing assembly 3.4.6
 Disassembling the left-hand drum bearing 3.4.8
 Left-hand drum bearing assembly,
 disassembled 3.4.8
 Installing the left-hand drum bearing assembly 3.4.9
 Removing the threshing drum 3.4.10
 Threshing drum, disassembled 3.4.12
 Renewing the beater bars 3.4.13
 Removing the threshing drum shaft 3.4.14
 Installing the threshing drum shaft 3.4.16
 Installing the threshing drum 3.4.17
 Impeller 3.5.1
 Removing the right-hand impeller bearing 3.5.1
 Installing the right-hand impeller bearing 3.5.3
 Removing the left-hand impeller bearing 3.5.3
 Installing the left-hand impeller bearing 3.5.5
 Removing the impeller 3.5.6
 Installing the impeller 3.5.8
 Removing the impeller shaft 3.5.9
 Installing the impeller shaft 3.5.10
 Removing the filler plates 3.5.11
 Installing the filler plates 3.5.11

4. Cleaning unit

Under-walker return floor 4.1.1
 Removing the under-walker return floor 4.1.1
 Rear rocker arm, disassembled 4.1.2
 Installing the under-walker return floor 4.1.2
 Straw walker 4.2.1
 Removing the straw walker racks 4.2.1
 Installing the straw walker racks 4.2.2
 Removing the front straw walker crankshaft 4.2.2
 Installing the front straw walker crankshaft 4.2.3
 Removing the rear straw walker crankshaft 4.2.3
 Installing the rear straw walker crankshaft 4.2.6
 Disassembling the straw walker crankshafts 4.2.7
 Straw walker bearing, disassembled 4.2.10
 Assembling the straw walker crankshaft 4.2.11
 Intensive separation system 4.3.1
 Replacing the agitator tines 4.3.1
 Removing the control shaft for
 the intensive separation system 4.3.1

Removing the intensive separation system crankshaft	4.3.2	Removing the cleaning fan shaft	4.8.5
Disassembling the intensive separation system crankshaft	4.3.5	Removing the centre cleaning fan bearing	4.8.9
Assembling the intensive separation system crankshaft	4.3.5	Centre cleaning fan bearing, disassembled	4.8.9
Installing the intensive separation system crankshaft	4.3.6	Installing the cleaning fan shaft	4.8.10
Sieve pan	4.4.1	Removing the cleaning fan rotors	4.8.11
Removing and installing the sieves	4.4.1	Installing the cleaning fan rotors	4.8.11
Removing the upper sieves (from serial no. ...)	4.4.1	Removing the cleaning fan housing	4.8.12
Removing the lower sieves (from serial no. ...)	4.4.2	Installing the cleaning fan housing	4.8.14
Installing the sieves (from serial no. ...)	4.4.3		
Tightening torques of axial mountings for the upper and lower sieves (from serial no. ...)	4.4.3		
Sieves – Basic setting (electric sieve adjustment – from serial no. ...)	4.4.4		
Removing the upper sieves (up to serial no. ...)	4.4.4		
Removing the lower sieves (up to serial no. ...)	4.4.6		
Installing the sieves (up to serial no. ...)	4.4.7		
Tightening torques of axial mountings for the upper and lower sieves (up to serial no. ...)	4.4.8		
Sieves – Basic setting (electric sieve adjustment – up to serial no. ...)	4.4.8		
Removing the 3-D upper sieve frame	4.4.9		
3-D upper sieve frame, disassembled	4.4.14		
Installing the 3-D upper sieve frame	4.4.15		
Removing the sieve pan	4.4.16		
Sieve pan, disassembled	4.4.19		
Installing the sieve pan	4.4.20		
Checking and adjusting the alignment of preparation floor and sieve pan	4.4.23		
Preparation floor	4.5.1		
Removing the preparation floor	4.5.1		
Preparation floor, disassembled	4.5.3		
Installing the preparation floor	4.5.4		
3-D sieve pan control system	4.6.1		
Adjusting the 3-D sieve pan control system	4.6.1		
Adjusting pivot arm (A) with the “3-D gauge”	4.6.2		
Rocker arm drive	4.7.1		
Removing the intermediate drive shaft for the rocker arm drive	4.7.1		
Intermediate drive shaft for rocker arm drive, disassembled	4.7.2		
Installing the intermediate drive shaft for the rocker arm drive	4.7.3		
Cleaning fan	4.8.1		
Removing the bearings of the cleaning fan	4.8.1		
Cleaning fan bearing, disassembled	4.8.4		
Installing the cleaning fan bearing	4.8.4		
		5. Grain delivery	
		Returns elevator	5.1.1
		Removing the returns elevator chain	5.1.1
		Installing the returns elevator chain	5.1.3
		Removing the top returns auger	5.1.3
		Installing the top returns auger	5.1.5
		Removing the returns elevator	5.1.6
		Disassembling the returns elevator	5.1.7
		Assembling the returns elevator	5.1.9
		Installing the returns elevator	5.1.9
		Removing the returns elevator boot	5.1.10
		Installing the returns elevator boot	5.1.11
		Removing the lower returns auger	5.1.11
		Installing the lower returns auger	5.1.13
		Grain elevator	5.2.1
		Removing the clean grain elevator chain	5.2.1
		Installing the clean grain elevator chain	5.2.2
		Removing the clean grain elevator head	5.2.3
		Dismantling the clean grain elevator head	5.2.4
		Clean grain elevator head, disassembled	5.2.6
		Assembling and installing the clean grain elevator head	5.2.7
		Removing the clean grain elevator shaft	5.2.7
		Installing the grain elevator shaft	5.2.8
		Removing the clean grain elevator boot	5.2.9
		Installing the clean grain elevator boot	5.2.10
		Removing the clean grain auger	5.2.10
		Installing the clean grain auger	5.2.13
		Removing the grain tank filler auger LEXION 460 – 420	5.2.14
		Removing the grain tank filler auger angle drive LEXION 460 – 420	5.2.15
		Disassembling the grain tank filler auger angle drive LEXION 460 – 420	5.2.15
		Grain tank filler auger, disassembled LEXION 460 – 420	5.2.17
		Installing the grain tank filler auger LEXION 460 – 420	5.2.18
		Removing the grain tank filler auger LEXION 415 – 405	5.2.20
		Disassembling the grain tank filler auger angle drive LEXION 415 – 405	5.2.21
		Grain tank filler auger, disassembled LEXION 415 – 405	5.2.23
		Installing the grain tank filler auger LEXION 415 – 405	5.2.24

Grain tank unloading	5.3.1
Removing the grain tank cross auger	5.3.1
Grain tank cross augers, disassembled	5.3.4
Installing the grain tank cross auger	5.3.5
Removing the vertical grain tank unloading auger	5.3.7
Installing the vertical grain tank unloading auger	5.3.10
Removing the horizontal grain tank unloading auger	5.3.11
Installing the horizontal grain tank unloading auger	5.3.13
Removing the lower grain tank unloading angle drive (from serial no. ...)	5.3.13
Disassembling the lower grain tank unloading angle drive (from serial no. ...)	5.3.15
Lower grain tank unloading angle drive, disassembled (from serial no. ...)	5.3.18
Assembling the lower grain tank unloading angle drive (from serial no. ...)	5.3.19
Installing the lower grain tank unloading angle drive (from serial no. ...)	5.3.22
Removing the lower grain tank unloading angle drive (up to serial no. ...)	5.3.23
Disassembling the lower grain tank unloading angle drive (up to serial no. ...)	5.3.24
Lower grain tank unloading angle drive, disassembled (up to serial no. ...)	5.3.27
Assembling the lower grain tank unloading angle drive (up to serial no. ...)	5.3.28
Installing the lower grain tank unloading angle drive (up to serial no. ...)	5.3.31
Removing the upper grain tank unloading angle drive	5.3.32
Disassembling the upper grain tank unloading angle drive	5.3.33
Upper grain tank unloading angle drive, disassembled	5.3.34
Assembling the upper grain tank unloading angle drive	5.3.35
Installing the upper grain tank unloading angle drive	5.3.38
Removing the grain tank unloading tube	5.3.39
Refitting the unloading auger tube	5.3.40
Removing the grain tank unloading tube elbow	5.3.40
Installing the grain tank unloading tube elbow	5.3.41
Removing the vertical unloading auger tube	5.3.41
Installing the vertical unloading auger tube	5.3.42

6. Straw discharge

Straw chopper	6.1.1
Removing the right-hand straw chopper bearing	6.1.1
Right-hand straw chopper bearing assembly, disassembled	6.1.3
Installing the right-hand straw chopper bearing	6.1.3
Removing the left-hand straw chopper bearing	6.1.5
Left-hand straw chopper bearing assembly, disassembled	6.1.6
Installing the left-hand straw chopper bearing	6.1.6
Removing the cutting cylinder	6.1.8
Cutting cylinder, disassembled	6.1.9
Installing the cutting cylinder	6.1.10
Replacing the free-swinging knives	6.1.11
Replacing the straw chopper support runners	6.1.14
Chaff spreader	6.2.1
Disassembling the chaff spreader	6.2.1
Assembling the chaff spreader	6.2.3

7. Drives

Drive belts	7.1.1
General Information	7.1.1
Drive system diagram, left-hand side	7.1.2
Drive system diagram, right-hand side	7.1.3
Left-hand drive belts	7.2.1
Removing the cutterbar drive belt (1) (Cutterbar drive without variable-speed drive)	7.2.1
Installing and adjusting the cutterbar drive belt (1) (Cutterbar drive without variable-speed drive)	7.2.2
Removing the cutterbar drive belt (2) (Cutterbar drive with variable-speed drive)	7.2.3
Installing and adjusting the cutterbar drive belt (2) (Cutterbar drive with variable-speed drive)	7.2.4
Removing the cutterbar variable-speed drive belt (3)	7.2.5
Installing and adjusting the cutterbar variable-speed drive belt (3)	7.2.6
Removing the impeller drive belt (4)	7.2.7
Installing and adjusting the impeller drive belt (4)	7.2.8
Removing the cutterbar intermediate drive belt (5)	7.2.9
Installing and adjusting the cutterbar intermediate drive belt (5)	7.2.10
Removing the hydraulic pump drive belt for straw / chaff spreader (6)	7.2.11
Installing and adjusting the hydraulic pump drive belt (6) for the straw / chaff spreader	7.2.11
Removing the main intermediate drive belt (7)	7.2.12
Installing and adjusting the main intermediate drive belt (7)	7.2.14
Removing the grain tank unloading intermediate drive belt (8)	7.2.16
Installing and adjusting the grain tank unloading intermediate drive belt (8)	7.2.17

Removing the straw chopper intermediate drive belt (9)	7.2.18	Installing and adjusting the rotary chaff screen drive belt (26)	7.3.14
Installing and adjusting the straw chopper intermediate drive belt (9)	7.2.19	Removing the fan drive belt (27)	7.3.15
Removing the straw chopper drive belt (10)	7.2.20	Installing and adjusting the fan drive belt (27)	7.3.16
Installing and adjusting the straw chopper drive belt (10)	7.2.21	Removing the suction blower drive belt (28)	7.3.17
Removing the straw chopper drive belt (11)	7.2.22	Installing and adjusting the suction blower drive belt (28)	7.3.18
Installing and adjusting the straw chopper drive belt (11)	7.2.23	Removing the air conditioner compressor drive belt (29)	7.3.19
Removing the straw chopper drive belt (12)	7.2.24	Installing and adjusting the air conditioner compressor drive belt (29)	7.3.20
Installing and adjusting the straw chopper drive belt (12)	7.2.26	Removing the compressed-air compressor drive belt (30)	7.3.21
Removing the sieve pan / straw walker intermediate drive belt (13)	7.2.27	Installing and adjusting the compressed-air compressor drive belt (30)	7.3.22
Installing and adjusting the sieve pan / straw walker intermediate drive belt (13)	7.2.28	Removing the alternator drive belt (31)	7.3.23
Removing the sieve pan / straw walker intermediate drive belt (14)	7.2.29	Installing and adjusting the alternator drive belt (31)	7.3.24
Installing and adjusting the sieve pan / straw walker intermediate drive belt (14)	7.2.30	Removing the feed rake conveyor suction blower drive belt (34)	7.3.25
Removing the sieve pan drive belt (15)	7.2.31	Installing and adjusting the feed rake conveyor suction blower drive belt (34)	7.3.26
Installing and adjusting the sieve pan drive belt (15)	7.2.33	Removing the straw spreader drive belt (36)	7.3.27
Removing the straw walker drive belt (16)	7.2.34	Installing and adjusting the straw spreader drive belt (36)	7.3.28
Installing and adjusting the straw walker drive belt (16)	7.2.35	Cutterbar drive	7.4.1
Removing the grain tank unloading drive chain (17)	7.2.36	Removing the front pulley of cutterbar drive (1)	7.4.1
Installing and adjusting the grain tank unloading drive chain (17)	7.2.37	Installing the front pulley of cutterbar drive (1)	7.4.2
Right-hand drive belts	7.3.1	Removing the deflection pulley of cutterbar drive (1)	7.4.2
Removing the intensive separator system drive belts (18 and 19)	7.3.1	Deflection pulley of cutterbar drive (1), disassembled	7.4.2
Installing and adjusting the intensive separator system drive belts (18 and 19)	7.3.2	Installing the deflection pulley of cutterbar drive (1)	7.4.3
Removing the fan intermediate drive belt (20)	7.3.3	Removing the slip clutch of cutterbar drive (1)	7.4.3
Installing and adjusting the fan intermediate drive belt (20)	7.3.4	Installing the slip clutch of cutterbar drive (1)	7.4.4
Removing the fan drive belt (21)	7.3.5	Replacing the slip clutch linings of cutterbar drive (1)	7.4.4
Installing and adjusting the fan drive belt (21)	7.3.5	Slip clutch of cutterbar drive (1), disassembled	7.4.5
Removing the threshing mechanism variable-speed drive belt (22)	7.3.6	Removing the jockey pulley of cutterbar drive (1)	7.4.6
Installing and adjusting the threshing mechanism variable-speed drive belt (22)	7.3.7	Jockey pulley of cutterbar drive (1), disassembled	7.4.6
Removing the threshing drum drive belt (23)	7.3.8	Removing the rear pulley of cutterbar drive (1) (up to serial no. ...)	7.4.6
Installing and adjusting the threshing drum drive belt (23)	7.3.9	Dismantling the rear pulley of cutterbar drive (1) (up to serial no. ...)	7.4.9
Removing the accelerator drive belt (24)	7.3.10	Rear pulley of cutterbar drive (1), disassembled (up to serial no. ...)	7.4.11
Installing and adjusting the accelerator drive belt (24)	7.3.11	Assembling the rear pulley of cutterbar drive (1) (up to serial no. ...)	7.4.12
Removing the radiator chaff screen intermediate drive belt (25)	7.3.12	Installing the rear pulley of cutterbar drive (1) (up to serial no. ...)	7.4.14
Installing and adjusting the rotary chaff screen intermediate drive belt (25)	7.3.13	Removing the rear pulley of cutterbar drive (1) (from serial no. ...)	7.4.16
Removing the radiator chaff screen drive belt (26)	7.3.14		

Dismantling the rear pulley of cutterbar drive (1) (from serial no. ...)	7.4.19	Disassembling the threshing drum variable-speed pulley assembly (hydraulic)	7.6.2
Rear pulley of cutterbar drive (1), disassembled (from serial no. ...)	7.4.21	Threshing drum variable-speed pulley assembly (hydraulic), disassembled	7.6.4
Assembling the rear pulley of cutterbar drive (1) (from serial no. ...)	7.4.22	Assembling the threshing drum variable-speed pulley assembly (hydraulic)	7.6.6
Installing the rear pulley of cutterbar drive (1) (from serial no. ...)	7.4.23	Installing the threshing drum variable-speed pulley assembly (hydraulic)	7.6.6
Removing the cutterbar variable-speed pulley assembly (spring-loaded)	7.4.25	Removing the threshing drum variable-speed pulley assembly (spring-loaded)	7.6.7
Disassembling the cutterbar variable-speed pulley assembly (spring-loaded)	7.4.26	Disassembling the threshing drum variable-speed pulley assembly (spring-loaded)	7.6.8
Cutterbar variable-speed pulley assembly (spring-loaded), disassembled	7.4.29	Threshing drum variable-speed pulley assembly (spring-loaded), disassembled	7.6.11
Assembling the cutterbar variable-speed pulley assembly (spring-loaded)	7.4.30	Assembling the threshing drum variable-speed pulley assembly (spring-loaded)	7.6.12
Installing the cutterbar variable-speed pulley assembly (spring-loaded)	7.4.34	Installing the threshing drum variable-speed pulley assembly (spring-loaded)	7.6.16
Removing the cutterbar drive V-belt pulley when a cutterbar variable-speed drive is fitted	7.4.36	Removing the threshing mechanism drive pulley	7.6.18
Disassembling the cutterbar drive V-belt pulley when a cutterbar variable-speed drive is fitted	7.4.36	Disassembling the threshing mechanism drive pulley	7.6.18
Cutterbar drive V-belt pulley with a cutterbar variable-speed drive fitted, disassembled	7.4.38	Threshing mechanism drive pulley, disassembled	7.6.20
Assembling the cutterbar drive V-belt pulley with a cutterbar variable-speed drive fitted	7.4.39	Assembling the threshing mechanism drive pulley	7.6.21
Installing the cutterbar drive V-belt pulley with a cutterbar variable-speed drive fitted	7.4.41	Installing the threshing mechanism drive pulley	7.6.23
Removing and disassembling the cutterbar drive deflection pulley (2) with a cutterbar variable-speed drive fitted	7.4.41	Threshing drum reduction gearbox	7.7.1
Assembling and installing the cutterbar drive deflection pulley (2) with a cutterbar variable-speed drive fitted	7.4.42	Removing the threshing drum reduction gearbox	7.7.1
Removing the cutterbar variable-speed pulley assembly (hydraulic)	7.4.42	Disassembling the threshing drum reduction gearbox	7.7.2
Disassembling the cutterbar variable-speed pulley assembly (hydraulic)	7.4.45	Threshing drum reduction gearbox, disassembled	7.7.6
Cutterbar variable-speed pulley assembly (hydraulic), disassembled	7.4.47	Assembling the threshing drum reduction gearbox	7.7.8
Assembling the cutterbar variable-speed pulley assembly (hydraulic)	7.4.49	Installing the threshing drum reduction gearbox	7.7.11
Installing the cutterbar variable-speed pulley assembly (hydraulic)	7.4.50	Threshing mechanism intermediate drive	7.8.1
Removing the cutterbar clutch	7.4.51	Removing the right-hand intermediate drive shaft bearing	7.8.1
Cutterbar clutch, disassembled	7.4.58	Installing the right-hand intermediate drive shaft bearing	7.8.2
Installing the cutterbar clutch	7.4.59	Removing the left-hand intermediate drive shaft bearing	7.8.2
Left-hand threshing mechanism drive	7.5.1	Installing the left-hand intermediate drive shaft bearing	7.8.3
Removing the threshing mechanism drive pulley assembly	7.5.1	Removing the intermediate drive shaft	7.8.4
Threshing mechanism drive pulley assembly, disassembled	7.5.7	Installing the intermediate drive shaft	7.8.4
Installing the threshing mechanism drive pulley assembly	7.5.8	Grain tank unloading drive	7.9.1
Right-hand threshing mechanism drive	7.6.1	Removing the grain tank unloading drive pulley	7.9.1
Removing the threshing drum variable-speed pulley assembly (hydraulic)	7.6.1	Installing the grain tank unloading drive pulley	7.9.3
		Chopper drive	7.10.1
		Removing the stage 1 chopper drive V-belt pulley	7.10.1

Stage 1 chopper drive V-belt pulley, disassembled	7.10.3	Removing the rear sieve pan drive deflection pulley	7.12.4
Assembling and installing the stage 1 chopper drive V-belt pulley	7.10.4	Rear sieve pan drive deflection pulley, disassembled	7.12.5
Removing the stage 2 chopper drive V-belt pulley	7.10.6	Assembling the rear sieve pan drive deflection pulley	7.12.5
Stage 2 chopper drive V-belt pulley, disassembled	7.10.8	Installing the rear sieve pan drive deflection pulley	7.12.5
Assembling and installing the stage 2 chopper drive V-belt pulley	7.10.9	Fan drive	7.13.1
Removing the jockey pulley of straw chopper drive (10)	7.10.11	Removing the stage 1 fan drive V-belt pulley	7.13.1
Jockey pulley of straw chopper drive (10), disassembled	7.10.11	Stage 1 fan drive V-belt pulley, disassembled	7.13.1
Assembling and installing the jockey pulley of straw chopper drive (10)	7.10.11	Installing the stage 1 fan drive V-belt pulley	7.13.1
Removing the jockey pulley of straw chopper drive (11)	7.10.12	Fan adjustment (electric)	7.13.2
Jockey pulley of straw chopper drive (11), disassembled	7.10.12	Fan adjustment (electric) Version 1 (up to serial no. ...)	7.13.3
Assembling and installing the jockey pulley of straw chopper drive (11)	7.10.13	Fan adjustment (electric) Version 2 (from serial no. ., up to serial no. .)	7.13.4
Removing the stage 3 chopper drive V-belt pulley	7.10.13	Fan adjustment (electric) Version 3 (from serial no. ...)	7.13.5
Stage 3 chopper drive V-belt pulley, disassembled	7.10.14	Removing the fan adjustment (electric) (Version 1)	7.13.6
Assembling and installing the stage 3 chopper drive V-belt pulley	7.10.14	Disassembling the fan adjustment (electric) (Version 1)	7.13.7
Removing the stage 3 chopper drive jockey pulley	7.10.15	Fan adjustment (electric), disassembled (Version 1)	7.13.9
Jockey pulley of stage 3 straw chopper drive, disassembled	7.10.15	Assembling the fan adjustment (electric) (Version 1)	7.13.10
Assembling and installing the stage 3 chopper drive jockey pulley	7.10.16	Installing the fan adjustment (electric) (Version 1)	7.13.12
Installing the straw chopper drive V-belt pulley	7.10.17	Removing the fan adjustment (electric) (Version 1, version 3)	7.13.14
Straw chopper drive V-belt pulley, disassembled	7.10.17	Disassembling the fan adjustment (electric) (Version 1, version 3)	7.13.15
Installing the straw chopper drive V-belt pulley	7.10.18	Fan adjustment (electric), disassembled (Version 1, version 3)	7.13.17
Straw spreader drive	7.11.1	Assembling the fan adjustment (electric) (Version 1, version 3)	7.13.18
Removing the straw spreader bearing housing	7.11.1	Installing the fan adjustment (electric) (Version 1, version 3)	7.13.20
Disassembling the straw spreader bearing housing	7.11.2	Removing the fan adjustment (electric) (Version 2)	7.13.22
Straw spreader bearing housing, disassembled	7.11.5	Disassembling the fan adjustment (electric) (Version 2)	7.13.23
Assembling the straw spreader bearing housing	7.11.7	Fan adjustment (electric), disassembled (Version 2)	7.13.25
Installing the straw spreader bearing housing	7.11.9	Assembling the fan adjustment (electric) (Version 2)	7.13.26
Sieve pan drive	7.12.1	Installing the fan adjustment (electric) (Version 2)	7.13.29
Removing the sieve pan / straw walker drive V-belt pulley	7.12.1	Remove the electric fan variable-speed drive	7.13.31
Sieve pan / straw walker drive V-belt pulley, disassembled	7.12.2	Electric fan variable-speed pulley assembly, disassembled	7.13.32
Installing the sieve pan / straw walker drive V-belt pulley	7.12.3	Assembling and installing the electric fan variable-speed pulley assembly	7.13.33
		Removing the fan drive jockey pulley (20)	7.13.36

Fan drive jockey pulley (20), disassembled	7.13.36	Installing the shifter rails	7.17.19
Installing the fan drive jockey pulley (20)	7.13.37	Installing the manual gearbox	7.17.22
Removing the fan variable-speed pulley assembly (spring-loaded)	7.13.37	Servo gearshift	7.17.25
Disassembling the fan drive variable-speed pulley assembly (spring-loaded)	7.13.38	Removing the shifter pistons	7.17.25
Fan variable-speed pulley assembly (spring-loaded), disassembled	7.13.40	Servo gearshift, disassembled	7.17.27
Assembling the fan variable-speed pulley assembly (spring-loaded)	7.13.41	Installing the shifter pistons	7.17.27
Installing and adjusting the fan variable-speed pulley assembly (spring-loaded)	7.13.42	Bleeding the shifter piston	7.17.28
Engine output	7.14.1	Brake	7.18.1
Removing the engine output pulley	7.14.1	Parking brake – Replacing the brake linings	7.18.1
Installing the engine output pulley	7.14.1	Bleeding the brake system	7.18.2
Removing the transfer gearbox	7.14.2	Disc brake – Changing the brake pads	7.18.2
Disassembling the transfer gearbox	7.14.7	Removing a brake calliper	7.18.3
Transfer gearbox, disassembled	7.14.11	Installing a brake calliper	7.18.4
Assembling the transfer gearbox	7.14.12	Steering axle	7.19.1
Installing the transfer gearbox	7.14.19	Removing the wheel bearing	7.19.1
Rotary screen drive	7.15.1	Wheel bearing, disassembled	7.19.4
Removing the rotary screen drive	7.15.1	Wheel bearing for rice option, disassembled	7.19.5
Disassembling the rotary screen drive	7.15.1	Installing the wheel bearing	7.19.6
Rotary screen drive, disassembled	7.15.3	Installing the wheel bearings for machines with the rice option	7.19.8
Assembling and installing the rotary screen drive	7.15.4	Removing the stub axle	7.19.9
Removing the fan drive	7.15.5	Stub axle, disassembled	7.19.11
Installing the fan drive	7.15.5	Installing the stub axle	7.19.12
Final drives	7.16.1	Setting the track width	7.19.13
Removing the final drive gearbox	7.16.1	Adjusting the steering axle end stops	7.19.14
Disassembling the final drive gearbox	7.16.1	Removing the steering axle	7.19.15
Removing the wheel drive shaft	7.16.1	Steering axle bearing, disassembled	7.19.16
Removing the intermediate shaft	7.16.3	Installing the steering axle	7.19.17
Removing the drive shaft	7.16.5	8. Machine body	
Final drive gearbox, disassembled	7.16.6	Rotary screen	8.1.1
Assembling the final drive gearbox	7.16.8	Removing the rotary screen	8.1.1
Installing the drive shaft	7.16.8	Disassembling the rotary screen	8.1.1
Installing the intermediate shaft	7.16.9	Rotary screen, disassembled	8.1.3
Installing the wheel drive shaft	7.16.11	Assembling and installing the rotary screen	8.1.4
Disassembling the planetary final drive gearbox	7.16.15	Trough and lateral panel, disassembled	8.1.6
Planetary final drive gearbox, disassembled	7.16.23	Adjusting the trough and the lateral panel (if suction blower with drive is fitted)	8.1.7
Assembling the planetary final drive gearbox	7.16.24	Removing the fan drive	8.1.8
Installing the final drive gearbox	7.16.28	Installing the fan drive	8.1.8
Manual gearbox	7.17.1	Removing the rotary screen suction blower	8.1.9
Removing the manual gearbox	7.17.1	Disassembling the rotary screen suction blower	8.1.9
Disassembling the manual gearbox	7.17.3	Rotary screen suction blower, disassembled	8.1.11
Removing the shifter rails	7.17.3	Assembling and installing the rotary screen suction blower	8.1.12
Removing the drive shaft	7.17.5	Drive axle	8.2.1
Removing the main shaft	7.17.6	Removing the drive axle	8.2.1
Removing the differential	7.17.8	Installing the drive axle	8.2.4
Disassembling the differential	7.17.9	9. Hydraulic system	
Differential, disassembled	7.17.11	Oil cooler	9.1.1
Assembling the differential	7.17.11	Removing the oil cooler	9.1.1
Installing the differential	7.17.13	Installing the oil cooler	9.1.4
Manual gearbox, disassembled	7.17.15	Maintenance	9.2.1
Assembling the manual gearbox	7.17.16	Hydraulic system	9.2.1
Installing the main shaft	7.17.17	Checking the oil level	9.2.1
Installing the drive shaft	7.17.18	Changing the hydraulic oil	9.2.2
		Filling instructions when changing the hydraulic oil	9.2.3

Hydraulic pumps	9.3.1	Removing the concave adjustment hydraulic cylinder	9.5.18
Removing the chaff spreader hydraulic pump	9.3.1	Disassembling the concave adjustment hydraulic cylinder	9.5.19
Disassembling the chaff spreader hydraulic pump	9.3.2	Concave adjustment hydraulic cylinder, disassembled	9.5.21
Chaff spreader hydraulic pump, disassembled	9.3.3	Assembling the concave adjustment hydraulic cylinder	9.5.22
Assembling the chaff spreader hydraulic pump	9.3.3	Installing the concave adjustment hydraulic cylinder	9.5.23
Installing the chaff spreader hydraulic pump	9.3.4	Removing the grain tank unloading tube swing hydraulic cylinder	9.5.23
Removing the ground drive hydraulic pump	9.3.4	Disassembling the grain tank unloading tube swing hydraulic cylinder	9.5.23
Installing the ground drive hydraulic pump	9.3.7	Grain tank unloading tube swing hydraulic cylinder, disassembled	9.5.25
Removing the hydraulic double pump	9.3.8	Assembling the grain tank unloading tube swing hydraulic cylinder	9.5.26
Installing the hydraulic double pump	9.3.8	Installing the grain tank unloading tube swing hydraulic cylinder	9.5.27
Hydrostatic fixed displacement motors	9.4.1	Removing the straw chopper drive hydraulic cylinder	9.5.27
Removing the ground drive hydrostatic fixed displacement motor	9.4.1	Disassembling the straw chopper drive hydraulic cylinder	9.5.28
Installing the ground drive hydrostatic fixed displacement motor	9.4.3	Straw chopper drive hydraulic cylinder, disassembled	9.5.29
Removing the chaff spreader hydrostatic fixed displacement motor	9.4.5	Assembling the straw chopper drive hydraulic cylinder	9.5.29
Installing the chaff spreader hydrostatic fixed displacement motor	9.4.8	Installing the straw chopper drive hydraulic cylinder	9.5.30
Removing the reverser drive hydrostatic fixed displacement motor	9.4.9	Removing the threshing drum variable-speed drive hydraulic cylinder	9.5.30
Reverser drive hydrostatic fixed displacement motor, disassembled	9.4.12	Installing the threshing drum variable-speed drive hydraulic cylinder	9.5.31
Installing the reverser drive hydrostatic fixed displacement motor	9.4.13	Removing the reverser drive hydraulic cylinder	9.5.32
Removing the straw spreader hydrostatic fixed displacement motors	9.4.14	Disassembling the reverser drive hydraulic cylinder	9.5.32
Installing the straw spreader hydrostatic fixed displacement motors	9.4.16	Reverser drive hydraulic cylinder, disassembled	9.5.33
Hydraulic cylinders – High-pressure hydraulic circuit	9.5.1	Assembling the reverser drive hydraulic cylinder	9.5.34
Removing the cutterbar cross levelling hydraulic cylinders	9.5.1	Installing the reverser drive hydraulic cylinder	9.5.34
Disassembling the cutterbar cross levelling hydraulic cylinders	9.5.1	Hydraulic cylinders for low-pressure hydraulics	9.6.1
Cutterbar cross levelling hydraulic cylinder, disassembled	9.5.3	Removing the threshing mechanism engagement hydraulic cylinder	9.6.1
Assembling the cutterbar cross levelling hydraulic cylinders	9.5.4	Disassembling the threshing mechanism engagement hydraulic cylinder	9.6.2
Installing the cutterbar cross levelling hydraulic cylinders	9.5.4	Threshing mechanism engagement hydraulic cylinder, disassembled	9.6.2
Bleeding the cutterbar cross levelling hydraulic cylinders	9.5.6	Assembling the threshing mechanism engagement hydraulic cylinder	9.6.3
Removing the cutterbar hydraulic cylinders	9.5.7	Installing the threshing mechanism engagement hydraulic cylinder	9.6.4
Cutterbar hydraulic cylinders –		Removing the grain tank unloading engagement hydraulic cylinder	9.6.4
Replacing the seals	9.5.7	Disassembling the grain tank unloading engagement hydraulic cylinder	9.6.5
Disassembling the cutterbar hydraulic cylinders	9.5.8		
Cutterbar hydraulic cylinder, disassembled	9.5.10		
Assembling the cutterbar hydraulic cylinder	9.5.11		
Installing the cutterbar hydraulic cylinders	9.5.12		
Adjusting the cutterbar hydraulic cylinders	9.5.12		
Removing the cutterbar variable-speed drive hydraulic cylinder	9.5.13		
Installing the cutterbar variable-speed drive hydraulic cylinder	9.5.14		
Disassembling the rotary coupling	9.5.14		
Rotary coupling, disassembled	9.5.16		
Assembling the rotary coupling	9.5.17		

Grain tank unloading engagement hydraulic cylinder, disassembled	9.6.6	Assembling the straw chopper hydraulic cylinder	9.6.31
Assembling the grain tank unloading engagement hydraulic cylinder	9.6.7	Installing the straw chopper hydraulic cylinder	9.6.32
Installing the grain tank unloading engagement hydraulic cylinder	9.6.8	Removing the 3-D sieve pan hydraulic cylinder	9.6.32
Removing the engine speed control hydraulic cylinder (from serial no. ...)	9.6.9	Disassembling the 3-D sieve pan hydraulic cylinder	9.6.32
Disassembling the engine speed control hydraulic cylinder (from serial no. ...)	9.6.9	3-D sieve pan hydraulic cylinder, disassembled	9.6.34
Engine speed control hydraulic cylinder, disassembled (from serial no. ...)	9.6.11	Assembling the 3-D sieve pan hydraulic cylinder	9.6.35
Assembling the engine speed control hydraulic cylinder (from serial no. ...)	9.6.12	Installing the 3-D sieve pan hydraulic cylinder	9.6.36
Pre-setting the engine speed control hydraulic cylinder (from serial no. ...)	9.6.14	Removing the pendulum control unit of the 3-D sieve pan	9.6.36
Installing the engine speed control hydraulic cylinder (from serial no. ...)	9.6.14	Disassembling the 3-D sieve pan pendulum control unit	9.6.36
Setting the engine speed control hydraulic cylinder (from serial no. ...)	9.6.15	Pendulum control unit of 3-D sieve pan, disassembled	9.6.38
Changing the road travel engine speed (country variants 20 km/h and/or 25 km/h) by converting the cylinder	9.6.16	Assembling the pendulum control unit for 3-D sieve pan	9.6.39
Conversion of cylinder to another country variant (20 km/h and/or 25 km/h)	9.6.16	Installing the 3-D sieve pan pendulum control unit	9.6.39
Removing the engine speed control hydraulic cylinder (up to serial no. ...)	9.6.20	Removing the yield meter moisture sensor hydraulic cylinder	9.6.40
Disassembling the engine speed control hydraulic cylinder (up to serial no. ...)	9.6.20	Disassembling the yield meter moisture sensor hydraulic cylinder	9.6.41
Engine speed control hydraulic cylinder, disassembled (up to serial no. ...)	9.6.23	Yield meter moisture sensor hydraulic cylinder, disassembled	9.6.42
Assembling the engine speed control hydraulic cylinder (up to serial no. ...)	9.6.24	Assembling the yield meter moisture sensor hydraulic cylinder	9.6.42
Pre-setting the engine speed control hydraulic cylinder (up to serial no. ...)	9.6.25	Installing the yield meter moisture sensor hydraulic cylinder	9.6.43
Installing the engine speed control hydraulic cylinder (up to serial no. ...)	9.6.25	Checking and adjusting the yield meter hydraulic cylinder	9.6.43
Setting the engine speed control hydraulic cylinder (up to serial no. ...)	9.6.26	Yield meter hydraulic cylinder, disassembled	9.6.45
Removing the straw chopper hydraulic cylinder	9.6.28	Hydraulic cylinder – Steering hydraulics	9.7.1
Disassembling the straw chopper hydraulic cylinder	9.6.28	Removing the steering cylinder	9.7.1
Straw chopper hydraulic cylinder, disassembled	9.6.30	Disassembling the steering cylinder	9.7.1
		Steering cylinder, disassembled	9.7.3
		Assembling the steering cylinder	9.7.4
		Installing the steering cylinder	9.7.5
		Removing the Autopilot steering cylinder	9.7.5
		Disassembling the Autopilot steering cylinder	9.7.6
		Autopilot steering cylinder, disassembled	9.7.9
		Assembling the Autopilot steering cylinder	9.7.10
		Installing the Autopilot steering cylinder	9.7.11
		Valve combinations	9.8.1
		Removing the feeder reversing 3/2-way valve	9.8.1
		Feeder reversing 3/2-way valve, disassembled	9.8.1
		Removing the cutterbar cross levelling 4/3-way valve	9.8.2
		Cutterbar cross levelling 4/3-way valve, disassembled	9.8.3
		Removing the concave adjustment pressure relief valve	9.8.4

Concave adjustment pressure relief valve, disassembled	9.8.4
Assembling the concave adjustment pressure relief valve	9.8.4
Removing the cutterbar and threshing drum variable-speed drive 3/3-way valves	9.8.4
Cutterbar and threshing drum variable- speed drive 3/3-way valve, disassembled	9.8.6
Installing the cutterbar and threshing drum variable-speed drive 3/3-way valves	9.8.7
Removing the threshing drum variable-speed drive 3/3-way valve	9.8.7
Threshing drum variable-speed drive 3/3-way valve, disassembled	9.8.8
Removing the concave, grain tank unloading tube and straw chopper 4/3-way valves	9.8.9
Concave, grain tank unloading tube and straw chopper 4/3-way valve, disassembled	9.8.10
Assembling the concave, grain tank unloading tube and straw chopper 4/3-way valves	9.8.11
Installing the concave, grain tank unloading tube and straw chopper 4/3-way valves	9.8.11
Removing the concave and grain tank unloading tube 4/3 way valves	9.8.11
Concave and grain tank unloading tube 4/3-way valve, disassembled	9.8.13
Assembling the concave and grain tank unloading tube 4/3-way valves	9.8.14
Installing the concave and grain tank unloading tube 4/3-way valves	9.8.14
Removing the main valve	9.8.14
Main valve, disassembled	9.8.16
Assembling the main valve	9.8.17
Installing the main valve	9.8.17
Removing the CLAAS Autopilot solenoid valve	9.8.18
CLAAS Autopilot solenoid valve, disassembled	9.8.19
Assembling the CLAAS Autopilot solenoid valve	9.8.20
Installing the CLAAS Autopilot solenoid valve	9.8.20
Removing the low-pressure solenoid valve block	9.8.20
Low-pressure solenoid valve block, disassembled	9.8.22
Assembling the low-pressure solenoid valve block	9.8.23
Installing the low-pressure solenoid valve block	9.8.23
Removing the chaff spreader flow divider	9.8.24
Installing the chaff spreader flow divider	9.8.25
Removing the low-pressure solenoid valve (yield meter)	9.8.25
Yield meter 3/2-way solenoid valve, disassembled	9.8.27
Installing the low-pressure solenoid valve (yield meter)	9.8.27

10. Engine

Cooling system	10.1.1
Removing the intercooler	10.1.1
Installing the intercooler	10.1.3
Removing the radiator	10.1.3
Installing the radiator	10.1.6
Fuel system	10.2.1
Removing the fuel tank	10.2.1
Installing the fuel tank	10.2.2
Engine	10.3.1
Removing the engine	10.3.1
Installing the engine	10.3.7

11. Index

Index	11.1.1
-------------	--------

Thanks for your reading.

Please click here to download complete manual instantly.

And can also choose other manuals.

Feel free --->write to me with any questions.

Our service email:

manuals007@hotmail.com