

Workshop Service Manual for 9280 DELTA Combine Series

MF 9280 DELTA + Auto Level



Workshop Service Manual for 9280 DELTA Combine Series

1	Introduction - Specifications	13
1.1	Using the manual	15
1.1.1	Using the manual	15
1.2	General specifications	16
1.2.1	General specifications	16
1.2.2	Tyre pressure	19
1.3	Dimensions and weight	21
1.3.1	Dimensions and weight	21
1.4	Safety precautions	23
1.4.1	Safety precautions	23
1.4.2	Safety in the workshop	23
1.4.3	Safety - a word to the mechanic	23
1.4.4	Safety - danger, warning and caution	23
1.4.5	Safety decals	24
1.4.6	General	24
1.4.7	Personal safety	24
1.4.8	Considerations with regard to equipment	25
1.4.9	General considerations	26
1.4.10	Operational considerations	26
1.4.11	Maintenance techniques	27
1.5	Practical advice	29
1.5.1	Practical advice	29
1.6	Start-up instructions	33
1.6.1	General	33
1.6.2	Pre-delivery checks	33
1.6.3	Instruction of combine operator	35
1.7	Conversion tables	38
1.7.1	Conventional units of measurement	38
1.8	Locking and sealing agents	39
1.8.1	Locking and sealing agents	39
1.9	Wheel nut torques	40
1.9.1	Wheels	40
1.9.2	Bolts with metric threads	40
1.9.3	Nuts with metric threads	41
2	Cutting table	43
2.1	General	45
2.1.1	Cutting table, general	45
2.2	Knife drive - wobble box	46
2.2.1	Removal	46
2.2.2	Assembly	46
2.2.3	Reconditioning the wobble box	47
2.2.4	Positioning the double fingers, knife and crop lifters	53
2.3	Table auger	54
2.3.1	Removal	54
2.3.2	Assembly	55
2.3.3	Replacing the shaft on the right-hand side	55
2.3.4	Replacing the shaft on the left-hand side	56
2.3.5	Replacing the crankshaft	57
2.3.6	Replacing the feathering fingers, bearings and bushes	58
2.3.7	Adjusting the table auger and feathering fingers	59

2.4	Table body	60
2.4.1	Adjusting the cut-off strips	60
2.4.2	Adjusting and positioning the ground sensor - PowerFlow	61
2.5	Slip clutch and chain drive	63
2.5.1	Removal	63
2.5.2	Assembly	63
2.5.3	Replacing the bearings and sprockets	64
2.6	Countershaft	65
2.6.1	Removal	65
2.6.2	Assembly	66
2.7	PowerFlow Table	67
2.7.1	PowerFlow Table	67
2.7.2	Removal, belts	67
2.7.3	Assembly, belts	70
2.7.4	Replacing the front rollers and bearings, scraper adjustment	71
2.7.5	Replacing the rear rollers and bearings, scraper adjustment	73
2.7.6	Replacing and aligning the bearing housing, rear rollers	74
2.7.7	Belt tensioning and running-in	75
3	Reel	79
3.1	Reel	81
3.1.1	Removal	81
3.1.2	Assembly	82
3.1.3	Replacing the reel tine bar and plastic bearings	83
3.1.4	Replacing the guide rollers, eccentric, guide ring and bearings	84
3.1.5	Replacing the reel plates	85
3.1.6	Replacing the reel tube, bearings	85
3.2	Oil motor and chain drive	86
3.2.1	Replacing the oil motor	86
3.2.2	Replacing the flow divider	86
3.3	Hydraulic cylinders	90
3.3.1	Replacing the cylinder – reel up/down	90
3.3.2	Replacement of cylinder – reel forward/back	91
3.3.3	Reconditioning of hydraulic cylinders	91
4	Main crop elevator	95
4.1	General	97
4.1.1	Main crop elevator, general	97
4.2	Main crop elevator	98
4.2.1	Removal	98
4.2.2	Assembly	99
4.2.3	Bearing block on machine frame	100
4.2.4	Replacement of lifting ram	100
4.2.5	Reconditioning of hydraulic cylinder	100
4.2.6	Replacing the cutting height preset sensor	101
4.3	Crop elevator chain	103
4.3.1	Crop elevator chain, general	103
4.3.2	Removal	103
4.3.3	Assembly	103
4.3.4	Replacement of slats	105
4.3.5	Replacing the slide rails in the crop elevator	105
4.3.6	Replacing the intermediate plate	106
4.4	Elevator chain top shaft	107
4.4.1	Removal	107
4.4.2	Assembly	108
4.4.3	Replacing the bearings	108
4.4.4	Replacing the sprockets	108
4.4.5	Replacing the shaft protection tube	110
4.5	Elevator chain front shaft	111
4.5.1	Removal	111
4.5.2	Assembly	111
4.5.3	Replacing the shaft, bearings and plate wheels	112

<https://www.ebooklibonline.com>

Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.

The full manual is available for immediate download.

<https://www.ebooklibonline.com>



4.6	Elevator countershaft	113
4.6.1	Removal	113
4.6.2	Assembly	114
4.6.3	Replacing the bearings, belt pulley	114
4.7	Table clutch and belt drive	115
4.7.1	Removal	115
4.7.2	Assembly	115
4.7.3	Reconditioning the clutch	116
4.8	Adapter	117
4.8.1	Removal	117
4.8.2	Assembly	118
4.8.3	Replacing the cylinder/connecting rod	118
4.8.4	Reconditioning of hydraulic cylinder	118
4.8.5	Replacing the angle sensor	119
4.9	Hydraulic reversing	120
4.9.1	Removal	120
4.9.2	Assembly	120
5	Threshing unit	121
5.1	General	123
5.1.1	Threshing unit, general	123
5.2	Stone trap	124
5.2.1	Removal	124
5.2.2	Assembly	125
5.3	Concave	126
5.3.1	Removal	126
5.3.2	Assembly	127
5.3.3	Adjusting the concave laterally	127
5.3.4	Concave setting - initial setting	128
5.3.5	Replacing the actuator	129
5.3.6	Replacing the lead-in plate	130
5.3.7	Replacing the shaft for concave setting	130
5.4	Threshing cylinder	132
5.4.1	Removal	132
5.4.2	Assembly	133
5.4.3	Replacing the bearings	134
5.4.4	Replacing the rasp bars and backing bars	135
5.4.5	Replacing the shaft and cylinder spiders	135
5.5	Cylinder variator - table clutch	137
5.5.1	Removal, hydraulic variator	137
5.5.2	Assembly, hydraulic variator	138
5.5.3	Reconditioning the hydraulic variator pulley	138
5.5.4	Removal, mechanical variator	140
5.5.5	Assembly, mechanical variator	140
5.5.6	Reconditioning the mechanical variator pulley	141
5.5.7	Removal, magnetic clutch	142
5.5.8	Assembly, magnetic clutch	143
5.5.9	Reconditioning the magnetic clutch	144
5.6	Bracket for counter drive	147
5.6.1	Removal	147
5.6.2	Assembly and alignment	147
5.7	Rear beater	149
5.7.1	Removal	149
5.7.2	Assembly	150
5.7.3	Replacing the bearings	151
5.8	Rear beater concave	152
5.8.1	Removal	152
5.8.2	Assembly	152
5.9	Rotor Feeder	153
5.9.1	Removal	153
5.9.2	Assembly	154
5.9.3	Replacing the bearings	155

5.9.4	Replacing deflector and distributor plates	156
5.10	Rotor Feeder concave	158
5.10.1	Removal	158
5.10.2	Assembly	158
6	Rotor unit	159
6.1	General	161
6.1.1	General	161
6.2	Rotor variator	162
6.2.1	Removal, hydraulic variator	162
6.2.2	Assembly, hydraulic variator	163
6.2.3	Reconditioning the hydraulic variator pulley	164
6.2.4	Removal, mechanical variator	164
6.2.5	Assembly, mechanical variator	164
6.2.6	Reconditioning the mechanical variator pulley - version 1	165
6.2.7	Reconditioning the mechanical variator pulley - version 2	166
6.2.8	Replacing and reconditioning the magnetic clutch	168
6.3	Shaft for mechanical variator	170
6.3.1	Removal	170
6.3.2	Assembly	170
6.4	Right-angle gear	171
6.4.1	Removal	171
6.4.2	Assembly	172
6.5	Rotor	174
6.5.1	Removal	174
6.5.2	Assembly	175
6.5.3	Replacing the front bearing	176
6.5.4	Replacing the rear bearing	177
6.6	Rotor cage	178
6.6.1	Removal	178
6.6.2	Assembly	180
6.6.3	Replacing grate sections	180
7	Shaker shoe - Fanning mill	181
7.1	General	183
7.1.1	Shaker shoe - fanning mill, general	183
7.2	Fanning mill	184
7.2.1	Removal	184
7.2.2	Assembly	185
7.2.3	Replacing the fan blades	185
7.2.4	Replacing the fanning mill deflectors	186
7.2.5	Replacement of seals	187
7.3	Main grain pan frame	188
7.3.1	General	188
7.3.2	Removal	188
7.3.3	Assembly	189
7.3.4	Replacing the swivel arm and bearings	190
7.3.5	Replacing the seals	191
7.4	Second grain pan	192
7.4.1	Removal	192
7.4.2	Assembly	192
7.4.3	Replacing the swivel arm and bearings	193
7.4.4	Adjusting second grain pan	194
7.5	Top shaker shoe	196
7.5.1	Removal	196
7.5.2	Assembly	197
7.5.3	Replacing the swivel arm and bearings	198
7.5.4	Replacement of seals	199
7.5.5	Replacing and calibrating the actuator - sieves	199
7.6	Bottom shaker shoe	201
7.6.1	Removal	201
7.6.2	Assembly	202



7.6.3	Replacing the swivel arm and bearings	203
7.6.4	Replacing the seals	203
7.6.5	Electric sieve setting – initial setting	203
7.7	Bottom augers	204
7.7.1	Bottom augers	204
7.7.2	Removal	204
7.7.3	Assembly	205
7.8	Eccentric drive	206
7.8.1	Removal	206
7.8.2	Assembly	207
7.8.3	Adjusting the connecting rod / aligning the shaker shoes	208
7.8.4	Replacing the connecting rod bearing	209
7.8.5	Replacing the bearings and eccentric shaft	210
7.9	Transmissions	211
7.9.1	Replacing and reconditioning the fanning mill variator	211
7.9.2	Adjusting the fanning mill variator	212
7.9.3	Replacing and reconditioning the counter drive	213
8	Elevators	215
8.1	Tank filling elevator	217
8.1.1	Removal	217
8.1.2	Assembly	218
8.1.3	Replacing the top shaft, bearings and sprockets	219
8.1.4	Replacement of bottom sprocket	220
8.1.5	Replacing the elevator chain	220
8.1.6	Moisture sensor	221
8.1.7	Yieldmeter sensor	221
8.2	Returns elevator	222
8.2.1	Removal	222
8.2.2	Assembly	223
8.2.3	Replacing the top shaft, bearings and sprockets	223
8.2.4	Replacing the bottom sprocket	224
8.2.5	Replacing the elevator chain	224
8.2.6	Returns volume sensor	224
8.3	Returns thresher	225
8.3.1	Removal	225
8.3.2	Fitting	225
8.3.3	Replacing the sprockets	225
8.3.4	Replacement of threshing cylinder	226
8.3.5	Reconditioning the right-angle gear	226
8.4	Tank filling auger	229
8.4.1	Removal	229
8.4.2	Fitting	229
8.4.3	Replacing the top bearing	229
8.4.4	Reconditioning the right-angle gear	230
8.5	Transmission	231
8.5.1	Replacing the shaft, bearings and sprockets	231
9	Engine	233
9.1	General	235
9.1.1	Engine, general	235
9.2	Replacing the engine	236
9.2.1	Removing the engine assembly	236
9.2.2	Fitting the engine assembly	238
10	Unloading auger - Grain tank	241
10.1	Unloading auger - horizontal	243
10.1.1	Removal	243
10.1.2	Assembly	243
10.2	Unloading auger - vertical	245
10.2.1	Removal	245
10.2.2	Assembly	245

10.2.3	Reconditioning the right-angle gear	246
10.3	Unloading tube - horizontal	247
10.3.1	Removal	247
10.3.2	Assembly	247
10.4	Unloading tube - vertical	248
10.4.1	Removal	248
10.4.2	Assembly	248
10.4.3	Replacing the swivel bearing	249
10.4.4	Replacing the hydraulic cylinder	250
10.4.5	Reconditioning of hydraulic cylinder	250
10.5	Unloading tube elbow	251
10.5.1	Removal	251
10.5.2	Assembly	251
10.5.3	Reconditioning the right-angle gear	252
10.6	Bottom auger and cover plate	254
10.6.1	Removal	254
10.6.2	Fitting	255
10.6.3	Replacing the bearings, safety clutch	255
10.7	Transmission	257
10.7.1	Replacing the unloading auger shaft, bearings	257
10.7.2	Replacing and reconditioning the magnetic clutch	258
10.8	Grain tank covers	260
10.8.1	Removal	260
10.8.2	Assembly	261
11	Drive unit	263
11.1	Radiator – intercooler	265
11.1.1	Removal	265
11.1.2	Fitting	266
11.2	Oil cooler	267
11.2.1	Removal	267
11.2.2	Assembly	267
11.3	Fuel cooler	268
11.3.1	Removal	268
11.3.2	Assembly	268
11.4	Condenser – air conditioning	269
11.4.1	Removal	269
11.4.2	Assembly	269
11.5	Rotary screen	270
11.5.1	Removal	270
11.5.2	Assembly	271
11.5.3	Adjusting the rotary screen and cleaning blade	272
11.5.4	Replacing the drive shaft and clutch	273
11.6	Dust aspirator	276
11.6.1	Removal	276
11.6.2	Assembly	277
11.7	Hydrostatic pump	278
11.7.1	Removal	278
11.7.2	Assembly	280
11.8	Auxiliary hydraulic pump	281
11.8.1	Removal	281
11.8.2	Fitting	281
11.9	Hydraulic pump - Maxi Spreader	282
11.9.1	Removal	282
11.9.2	Assembly	282
11.10	Hydraulic oil tank	283
11.10.1	Removal	283
11.10.2	Fitting	283
11.11	Fuel tank	284
11.11.1	Removal	284
11.11.2	Fitting	284
11.11.3	Tank gauge	284

11.12 Diesel additive and dosing equipment	285
11.12.1 Removal	285
11.12.2 Assembly	285
11.12.3 Supply module	285
11.12.4 Dosing module	286
11.12.5 Tank sensor	286
11.13 Compressor – air conditioning	287
11.13.1 Removal	287
11.13.2 Assembly	287
11.14 Power take-off	288
11.14.1 Removal	288
11.14.2 Assembly	288
11.14.3 Replacing the clutch	289
11.14.4 Replacing the output shaft/bearings	290
12 Transmissions	291
12.1 General	293
12.1.1 Transmissions, General	293
12.2 Countershaft	294
12.2.1 Removal	294
12.2.2 Assembly	296
12.2.3 Replacing the bearings	296
12.2.4 Reconditioning the safety clutch	297
12.3 Replacing the belts, right-hand side	298
12.3.1 Rear beater - counter drive, cylinder variator	298
12.3.2 Counter drive, variator - threshing cylinder	299
12.3.3 Rear beater - Rotor Feeder	300
12.3.4 Fanning mill - fanning mill variator	300
12.3.5 Rear beater - fanning mill variator	301
12.3.6 Unloading auger shaft - unloading auger	301
12.3.7 Unloading auger shaft - rotary screen clutch	302
12.3.8 Unloading auger shaft - dust aspirator	303
12.3.9 Countershaft – counter drive, elevators	304
12.3.10 Rotor countershaft - right-angle gear	304
12.4 Replacing the chains, right-hand side	305
12.4.1 Counter drive, elevators - returns elevator	305
12.4.2 Counter drive, elevators - tank filling elevator	305
12.4.3 Counter drive, elevators - tank filling auger	306
12.4.4 Returns elevator - returns thresher	306
12.4.5 Reel drive	307
12.5 Replacing the belts, left-hand side	308
12.5.1 Countershaft - rear beater	308
12.5.2 Countershaft - counter drive, straw chopper	308
12.5.3 Counter drive - straw chopper	309
12.5.4 Engine - countershaft	309
12.5.5 Rear beater - countershaft, shaker shoe drive	311
12.5.6 Countershaft, shaker shoe drive - eccentric shaft	312
12.5.7 Engine - rotor countershaft	312
12.5.8 Rear beater - elevator chain top shaft / front shaft	313
12.5.9 Engine - unloading auger shaft	315
12.5.10 Engine - hydrostatic pump	316
12.5.11 PTO shaft – table countershaft	317
12.5.12 Table countershaft - knife drive	317
12.5.13 Countershaft - hydraulic pump, chaff spreader	318
12.6 Replacing the chains, left-hand side	319
12.6.1 Table countershaft - table auger	319
12.6.2 Table auger - belt rollers (PowerFlow)	319
12.6.3 Hydraulic motor, reversing - elevator countershaft	320
12.6.4 Bottom auger – unloading auger	321

13 Undercarriage	323
13.1 Auto Level final drive bracket	325
13.1.1 Removal	325
13.1.2 Assembly	326
13.1.3 Replacing the bushing	328
13.1.4 Replacing the hydraulic cylinder	329
13.1.5 Reconditioning of hydraulic cylinder	329
13.1.6 Adjusting the Auto Level potentiometer	330
13.2 Final drives	331
13.2.1 Removal	331
13.2.2 Assembly	332
13.2.3 Reconditioning the final drives	333
13.3 Gearbox	337
13.3.1 Removal	337
13.3.2 Assembly	338
13.3.3 Replacing the shifter cylinders and sensor	339
13.3.4 Adjusting the shifter cylinders and sensor	340
13.3.5 Replacing the lubrication pump	343
13.3.6 Replacing the shifter forks	344
13.3.7 Reconditioning the differential	345
13.3.8 Reconditioning the gearbox	348
13.4 Hydrostatic motor	352
13.4.1 Removal	352
13.4.2 Assembly	352
13.5 Brakes	353
13.5.1 Replacing the brake blocks	353
13.5.2 Replacement of brake discs	354
13.5.3 Bleeding the brakes	356
13.5.4 Brake pedals and main cylinder	356
13.5.5 Replacing the handbrake shoes	359
13.5.6 Adjustment of hydraulic hand brake	360
13.6 Rear axle	361
13.6.1 General	361
13.6.2 Removal	361
13.6.3 Assembly	362
13.6.4 Replacing the king pins and bushings	363
13.6.5 Replacing the steering cylinder	364
13.6.6 Reconditioning the hydraulic cylinder, rear axle	364
13.6.7 Adjusting the toe-in and steering deflection	365
13.6.8 Replacing the wheel bearings, rear axle	368
14 Cab	369
14.1 Multi-function lever and control panel	371
14.1.1 Control panel	371
14.1.2 Armrest	372
14.1.3 Multi-function lever	373
14.2 Replacing the windscreen	375
14.2.1 Replacing the windscreen	375
14.3 Control panel in roof	376
14.3.1 Control panel in roof	376
14.4 Roof	377
14.4.1 Outer roof	377
14.4.2 Inspection doors	378
14.4.3 Replacing the windscreen wiper	378
14.4.4 Replacing the blower	379
14.4.5 Replacing the heating element/tap	380
14.4.6 Replacing evaporator	380
14.5 Troubleshooting – Climate control	381
14.5.1 Climate control faults in general	381
14.5.2 ECS – Electronic control unit	381
14.5.3 Troubleshooting table	381

15 Hydraulics	385
15.1 General	387
15.1.1 Hydraulics, general.	387
15.1.2 Emptying and filling the hydrostatic system	389
15.1.3 Running in and bleeding the hydrostatic system	390
15.1.4 Running in and bleeding the auxiliary hydraulics	391
15.2 Hydraulic diagrams	392
15.2.1 Hydraulic diagrams	392
15.3 Hydrostatic system	395
15.3.1 Hydrostatic system	395
15.4 Gearshift	397
15.4.1 Gearshift	397
15.5 Handbrake	398
15.5.1 Hand brake	398
15.6 Auxiliary hydraulics	399
15.6.1 Auxiliary hydraulics	399
15.7 Cutting table	401
15.7.1 Cutting table	401
15.8 Auto Level	404
15.8.1 Auto Level - hydraulic cylinders	404
15.9 Reel	405
15.9.1 Reel	405
15.10 Steering	408
15.10.1 Steering - hydraulics	408
15.11 Cylinder variator	409
15.11.1 Cylinder variator - hydraulics	409
15.12 Rotor variator	410
15.12.1 Rotor variator	410
15.13 Unloading auger	411
15.13.1 Unloading auger - hydraulics	411
15.14 Reversing	412
15.14.1 Reversing - hydraulics	412
15.15 Chaff spreader	413
15.15.1 Chaff spreader - hydraulics	413
15.16 Maxi Spreader	414
15.16.1 Maxi Spreader - hydraulics	414
15.17 Troubleshooting - hydrostatic transmission	416
15.17.1 Hydrostatic transmission faults in general	416
15.17.2 Pump and motor specifications	416
15.17.3 Functional diagram, HPV pump - HMF motor	417
15.17.4 Connecting test equipment	419
15.17.5 Troubleshooting table	420
15.17.6 Checking the charge pump	421
15.17.7 Checking the high pressure valves	421
15.17.8 Checking the cold start valve	421
15.17.9 Checking the servo control	422
15.17.10 Checking the hydraulic pump	423
15.17.11 Checking the hydraulic motor	424
16 Electrical system	425
16.1 General	427
16.1.1 Electrical system, general	427
16.2 Description of DATAVISION	428
16.2.1 Description of DATAVISION	428
16.3 Electric box	429
16.3.1 Replacing the terminal	429
16.3.2 Replacing the job computers	429
16.4 Calibrations	432
16.4.1 Speed calibration	432
16.4.2 Calibrating the concave	432
16.4.3 Shaft alarm calibration	432
16.4.4 Calibrating the electrical sieves	433

16.4.5	Calibrating the electrical straw deflectors	433
16.4.6	Calibrating the Auto Level combine	433
16.4.7	Table calibration	434
16.5	Diagrams overview	436
16.5.1	Diagrams overview	436
16.6	Wiring diagrams	440
16.6.1	Wiring diagrams	440
16.7	Diagrams - computer input/output	454
16.7.1	Diagrams input/output	454
16.8	Diagramme ECU sensor connections	458
16.8.1	Diagramme ECU sensor connections - Stage 3b, 7 cylinder engine	458
16.9	Connectors	460
16.9.1	Connectors	460
16.10	W-connecting points	467
16.10.1	W-connecting points	467
16.11	Components	468
16.11.1	Components	468
16.12	Key to symbols	537
16.12.1	Key to symbols	537
16.13	Wiring overview	538
16.13.1	Wiring overview	538
17	Straw chopper	585
17.1	General	587
17.1.1	Replacing and calibrating the electric actuator – straw deflectors	587
18	General assembly instructions	589
18.1	Fitting gib-head keys	591
18.1.1	Fitting gib-head keys	591
18.2	Fitting tightening pins	592
18.2.1	Fitting tightening pins	592
18.3	Fitting hydraulic pipes and screw connections	593
18.3.1	Fitting hydraulic pipes and screw connections	593
18.4	Fitting a flanged bearing with locking collar	595
18.4.1	Fitting a flanged bearing with locking collar	595
18.5	Fitting sliding bushings	596
18.5.1	Fitting sliding bushings	596
18.6	Removing the revolution sensor	597
18.6.1	Removing the revolution sensor	597
18.7	Fitting tightening rings	598
18.7.1	Fitting tightening rings	598
19	Miscellaneous data	599
19.1	General	601
19.1.1	Miscellaneous data, general	601
19.2	Speeds - adjustment values	602
19.2.1	Speeds - adjustment values	602
19.3	Maintenance	603
19.3.1	Lubrication chart, intervals	603
19.3.2	Lubrication chart, right- and left-hand side	606
19.3.3	Lubrication chart, main crop elevator and front axle	608
19.3.4	Lubrication points, left-hand machine side	609
19.3.5	Lubrication points, right-hand machine side	624
19.3.6	Lubricants and operating fluids	639
19.3.7	Gear	640
19.3.8	Air-conditioning	641

1. Introduction - Specifications

1.1	Using the manual	15
1.1.1	Using the manual	15
1.2	General specifications	16
1.2.1	General specifications	16
1.2.2	Tyre pressure	19
1.3	Dimensions and weight	21
1.3.1	Dimensions and weight	21
1.4	Safety precautions	23
1.4.1	Safety precautions	23
1.4.2	Safety in the workshop	23
1.4.3	Safety - a word to the mechanic	23
1.4.4	Safety - danger, warning and caution	23
1.4.5	Safety decals	24
1.4.6	General	24
1.4.7	Personal safety	24
1.4.8	Considerations with regard to equipment	25
1.4.9	General considerations	26
1.4.10	Operational considerations	26
1.4.11	Maintenance techniques	27
1.5	Practical advice	29
1.5.1	Practical advice	29
1.6	Start-up instructions	33
1.6.1	General	33
1.6.2	Pre-delivery checks	33
1.6.3	Instruction of combine operator	35
1.7	Conversion tables	38
1.7.1	Conventional units of measurement	38
1.8	Locking and sealing agents	39
1.8.1	Locking and sealing agents	39
1.9	Wheel nut torques	40
1.9.1	Wheels	40
1.9.2	Bolts with metric threads	40
1.9.3	Nuts with metric threads	41

1.1 Using the manual

1.1.1 Using the manual

T008027

General

All operations described in this manual relating to repairs and maintenance must only be carried out by trained service personnel. The purpose of the manual is to help dealers and workshops start up, service and repair AGCO's equipment as efficiently and effectively as possible. If the specified procedures are followed and the recommended special tools used where necessary, jobs can be completed within the time indicated in the "Repair Time Schedule" manual.

Pagination

Example: [see §3.1.3, page 83](#)

This manual is divided into chapters and sections. In the example the figures show:

First figure = Chapter

Second figure = Section

Third figure = Consecutive number in the section in question

69 = Page number in manual

The publication number and version appear at the bottom of the page.

Use

To make it easier to look things up, there is a table of contents at the beginning of every chapter listing the various sections in the chapter.

Modifications

Modified pages have the same section numbering as their predecessors: Only the page number and version number change.

The old pages must be destroyed.

Service tools

In the case of jobs that require service tools, the number of the tool is specified at the point in the text where it is needed.

Repairs and replacing parts

When replacing parts, it is very important to only ever use genuine AGCO spares.

Please pay particular attention to the following points when it comes to repairs and fitting spare parts or other equipment.

Fitting non-genuine spare parts may impair the safety of the machine.

In some countries it is against the law to fit parts that do not conform to the manufacturer's specifications. Torque wrenches must always be adjusted in accordance with the instructions given in the workshop manual. Fit locking devices where specified. If the locking device breaks when removed, fit a new one.

If non-genuine AGCO parts are fitted, the machine will no longer be covered by the right to complain, as the manufacturer provides a warranty on all AGCO components. AGCO dealers are under the obligation to supply genuine parts only.

Repair Time Schedule

The "Repair Time Schedule" manual contains a table of standard time requirements for the commonest repairs on a combine. The manual's sections follow the layout of the spare parts catalogue.

1.2 General specifications

1.2.1 General specifications

T013214

Cutting table	Unit	9280 DELTA
Quick-attach type, can be attached and removed directly on the ground. Power take-off with transmission shaft		
Cutting height PowerFlow	cm	-40 to +148
Knife speed	strokes/minute.	1138
Hydraulically balanced by pressure accumulators		yes
Electrohydraulic cutting height presetting		yes

Reel	Unit	9280 DELTA
Electrohydraulic reel drive	rpm	0-50
Peripheral speed	km/h	0-9.1
Electrohydraulic reel control up/down and fore/aft		yes
Hydraulic reversing		yes

Threshing cylinder	Unit	9280 DELTA
Speed, normal	rpm	360-1080
Width	cm	168
Number of rasp bars	units	8
Diameter	cm	60
Weight	kg	318
Electrohydraulic speed adjustment		yes
Peripheral speed	m/sec.	11.3-33.9
Constant Flow		yes

Concave	Unit	9280 DELTA
Concave area	cm ²	10600
Number of rub bars	units	13
Concave wires, self-cleaning, spring steel	mm	Ø 3.5
Concave wrap	degrees	117
Concave adjustable from operator seat		yes

Rear beater	Unit	9280 DELTA
Diameter	cm	37.5

Rotor Feeder	Unit	9280 DELTA
Speed, normal	rpm	950
Speed, reduced	rpm	475
Diameter	cm	50
Width	cm	168
Separation area	cm ²	390



Suggest:

For more complete manuals. Please go to the home page.

<https://www.ebooklibonline.com>

If the above button click is invalid. Please download this document first, and then click the above link to download the complete manual.

Thank you so much for reading

Rotors	Unit	9280 DELTA
Qty	units	2
Diameter	mm	475
Length	cm	415
Area with Rotor Feeder	cm ²	3537
Separation area	m ²	3.54
Wrap, rotor grate	degrees	150
Speed	rpm	360-1000
Rotor fingers (per rotor)	units	38
Hatch in straw hood for cleaning rotor discharge		yes

Main grain pan	9280 DELTA
Two-sectioned lengthwise	yes
Stepped sections removable for cleaning	yes
Crop channelling	yes

Shaker shoe	Unit	9280 DELTA
Two-sectioned lengthwise		yes
Adjustable sieves		yes
Sieve area	cm ²	5300
Opposite movement of sieves		yes
Crop channelling		yes
Work light		yes

Fanning mill	Unit	9280 DELTA
Venturi system		yes
Two-sectioned centrifugal blower		yes
Electrical speed adjustment from operator seat or at shaker shoe (left-hand side)		yes
Speed	rpm	460-1150
Reduced speed	rpm	310-790

Grain tank	Unit	9280 DELTA
Capacity	litres	10500 (AL 9500)
Inside light		yes
Adjustable full warning		yes
Outside steps and inside ladder for easy access		yes
Sampling tray		yes

1

Unloading auger	Unit	9280 DELTA
Enclosed system, electrohydraulically pivotable		yes
Unloading also in partially turned-in position, and without threshing unit being engaged		yes
Unloading (depending on conditions)	sec.	121 (AL 110)
Unloading height, max. (G)	cm	450
Unloading auger diameter	cm	33

Engine	Unit	9280 DELTA
Type, AGCO SISU POWER		98 ATI 661
Speed	rpm	2100
Volume	litres	9.8
Number of cylinders	units	7
Gross power* (with Power Boost**)	HP	466 (508)
Gross power* (with Power Boost**)	kW	343 (374)
Engine oil, capacity	litres	35
Rotary screen	units	1
Exhaust-aspirated air cleaner on air intake		yes
Fuel tank, capacity	litres	750
AdBlue tank, capacity	litres	85
Coolant	litres	45
* Gross power according to ISO 14396		
** Power Boost ensures additional capacity during unloading. Through a signal from the unloading system the engine output is increased by 42 HP / 31 kW during unloading.		

Gear oil	Unit	9280 DELTA
Gearbox contains	litres	9.5
Coupler housing for oil motor	litres	1.5
Final drives contain	litres	6
The rotor gear has a capacity of	litres	1.5

Transmission	Unit	9280 DELTA		
Hydrostatic transmission		yes		
4-speed, electric gearshift		yes		
Speed	1. gear	Forward	km/h	0-6
		Reverse	km/h	0-3*
	2. gear	Forward	km/h	0-12
		Reverse	km/h	0-6
	3. gear	Forward	km/h	0-20
		Reverse	km/h	0-10
	4. gear	Forward	km/h	0-25**
		Reverse	km/h	0-12
*Reverse speed ranges up to 6 km/h when the threshing unit is engaged.				
** Applies to all countries except Germany where max. speed is 20 km/h.				

<https://www.ebooklibonline.com>

Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.

The full manual is available for immediate download.

<https://www.ebooklibonline.com>