



# Instructions manual

## Operating & Maintenance

**4812276718.pdf**

**Planer  
PL500 (IIIA/T3)  
PL500 (IV/T4f)**

**Diesel engine  
Cummins QSF 3.8-C130  
Cummins QSF 3.8-C**

**Serial number  
10000910H0C006249  
10000907E0C005599**



---

Original instructions.  
Reservation for changes



## Contents

<b>Instruction</b> .....	1
The machine.....	1
Intended use .....	1
Warning symbols .....	2
General .....	2
CE marking and Declaration of conformity .....	2
<b>Safety – General instructions</b> .....	3
<b>Safety – when operating</b> .....	5
Slopes.....	6
<b>Safety (Optional)</b> .....	7
Conveyor .....	7
Hydraulic chassis leg .....	8
Roof (option).....	8
<b>Special instructions</b> .....	9
Special instructions .....	9
Standard lubricants and other recommended oil and fluids .....	9
High ambient temperatures, above +40°C (104°F).....	9
Lower ambient temperature – Freeze risk.....	9
Temperatures.....	9
High pressure cleaning .....	10
Fire fighting .....	10
Battery handling.....	10
Jumping starting (24V) .....	11
<b>Technical specifications</b> .....	13
Vibrations – Operator station .....	13
Noise level .....	13
Dimensions, side view .....	14
Dimensions, top view .....	15

## Contents

<b>Weights and volumes</b> .....	16
<b>Working capacity</b> .....	16
<b>General</b> .....	17
<b>Tightening torques</b> .....	18
<b>Machine description</b> .....	19
<b>Descriptions of assemblies and functions</b> .....	19
<b>Machine description</b> .....	21
<b>Machine description</b> .....	24
<b>Identification</b> .....	24
<b>Machine plate</b> .....	24
<b>Explanation of 17PIN serial number</b> .....	25
<b>Conveyor plate</b> .....	25
<b>Engine plate</b> .....	25
<b>Decals</b> .....	26
<b>Positioning of labels, right-hand side</b> .....	26
<b>Positioning of labels, left-hand side</b> .....	27
<b>Info decals</b> .....	30
<b>Instruments/Controls</b> .....	31
<b>Main console</b> .....	31
<b>Ergo control box</b> .....	35
<b>Screen structure for setting and display options</b> .....	38
<b>Description of error codes, dialog boxes</b> .....	51
<b>Electrical system</b> .....	62
<b>Main fuses</b> .....	62
<b>Fuses, machine</b> .....	63
<b>Fuses boxes</b> .....	63
<b>Relay, machine</b> .....	64
<b>Functional description</b> .....	65
<b>Scraper lock – B9</b> .....	65
<b>Milling safety – B10</b> .....	65

<b>Locking device, scraper .....</b>	66
<b>Locking pin, ladder .....</b>	66
<b>Working lights.....</b>	66
<b>Emptying/Filling water tank .....</b>	67
<b>Panel protection.....</b>	67
<b>Hydraulic front plate – Milling housing.....</b>	68
<b>Bits – Tool holder.....</b>	68
<b>Typical wear marks on tool holder .....</b>	69
<b>Typical wear marks on bits .....</b>	69
<b>Bits – Checking – Fitting/Removing .....</b>	70
<b>Tool holder – Checking/Replacing .....</b>	71
<b>Rear door – Milling housing.....</b>	72
<b>Roof (option).....</b>	73
<b>Raise/Lower the roof manually .....</b>	74
<b>Operation .....</b>	75
<b>Before starting .....</b>	75
<b>Checks before starting .....</b>	75
<b>Master switch – Switching on .....</b>	75
<b>Operator's seat - Adjustment.....</b>	75
<b>Take away the panel protection .....</b>	76
<b>Instrument and lamp checks.....</b>	76
<b>Checking the working hours.....</b>	76
<b>View.....</b>	77
<b>Roof adjustment (Option) .....</b>	77
<b>Starting .....</b>	78
<b>Starting the engine .....</b>	78
<b>Driving .....</b>	79
<b>Positioning .....</b>	79
<b>Driving the machine .....</b>	79
<b>Driving on the difficult surfaces.....</b>	81

## Contents

<b>Swivel chassis leg, hydraulic</b> .....	81
<b>Pointer</b> .....	82
<b>Milling/Leveling</b> .....	82
<b>Indication of milling edge</b> .....	83
<b>Spirit level</b> .....	83
<b>Milling preparations</b> .....	84
<b>Milling without automatic leveling</b> .....	85
<b>Milling with automatic leveling (option)</b> .....	85
<b>Stop milling</b> .....	86
<b>Milling instruction</b> .....	87
<b>Milling protection</b> .....	87
<b>Resetting milling depth</b> .....	87
<b>Surface milling</b> .....	88
<b>Milling at edge of roadway or at shoulders</b> .....	88
<b>Milling at curb with folded out chassis leg</b> .....	89
<b>Milling at curb with folded in chassis leg</b> .....	89
<b>Braking</b> .....	90
<b>Normal braking</b> .....	90
<b>Secondary brake</b> .....	90
<b>Emergency braking</b> .....	90
<b>Parking</b> .....	91
<b>Parking/Switching off</b> .....	91
<b>Before leaving the machine</b> .....	91
<b>Master switch</b> .....	91
<b>Uncouple of conveyor – rigid</b> .....	92
<b>Fold the conveyor (hydraulic)</b> .....	93
<b>Uncoupling of conveyor – foldable</b> .....	93
<b>Long-term parking</b> .....	95
<b>Long-term parking</b> .....	95
<b>Battery</b> .....	95

<b>Engine</b> .....	95
<b>Watering system</b> .....	95
<b>Hoods, tarpaulin</b> .....	95
<b>Fuel tank</b> .....	96
<b>Hydraulic reservoir</b> .....	96
<b>Miscellaneous</b> .....	97
<b>Lifting</b> .....	97
<b>Lifting the planer</b> .....	97
<b>Lifting the conveyor</b> .....	99
<b>Towing/Recovery</b> .....	100
<b>Towing the planer</b> .....	101
<b>Transport</b> .....	102
<b>Machine prepared for transport</b> .....	102
<b>Securing PL500 for loading</b> .....	102
<b>Load carrier</b> .....	103
<b>Operating instructions – Summary</b> .....	105
<b>Preventive maintenance</b> .....	107
<b>Maintenance – Lubricants and symbols</b> .....	109
<b>Maintenance – Lubricants and symbols</b> .....	109
<b>Fluid volumes</b> .....	109
<b>Maintenance – Maintenance schedule</b> .....	111
<b>Schedule</b> .....	111
<b>General</b> .....	112
<b>After the FIRST 10 hours of operation</b> .....	112
<b>Every 10 hours of operation (Daily)</b> .....	113
<b>Every 50 hours of operation (Weekly)</b> .....	114
<b>After the FIRST 100 hours of operation</b> .....	114
<b>After the FIRST 250 hours of operation</b> .....	114
<b>Every 250 hours of operation (Monthly)</b> .....	115
<b>Every 500 hours of operation (Every three months)</b> .....	115

## Contents

---

Every 1000 hours of operation (Every six months).....	115
Every 2000 hours of operation (Yearly).....	116
<b>Maintenance – 10h .....</b>	<b>117</b>
Diesel engine – Check oil level.....	117
Hydraulic reservoir – Check fluid level .....	118
Fuel tank – Filling .....	118
Check the high pressure hydraulic filter.....	119
Water tank – Filling.....	119
Check return suction filter – suction side .....	120
Sprinkler system/nozzle.....	120
Water filter – Checking/Replacing .....	121
Sprinkler system – Draining.....	121
Check of belt tension – belt rollers, conveyor belt .....	122
Milling drum – Drive belt – Replace .....	123
Brake function/Emergency stop – Check.....	124
Checking reserve brake function .....	124
Diesel engine – Checking the drive belt.....	125
Side shield – Check .....	125
Wear plate of side shield – Replace.....	126
Water separator, fuel prefilter – Draining.....	127
Clean cooler .....	127
Check hydraulic front plate – Milling housing.....	128
<b>Maintenance – 50h .....</b>	<b>130</b>
Air cleaner – Emptying .....	130
Chassis leg, drive wheel planetary gear – Check of oil level.....	131
Drum gearbox – Check of oil level.....	131
Lubrication points .....	132
Belt tensioner.....	132
Chassis leg, right side .....	132
Guide, two-wheel variant .....	133

Guide, two-wheel variant .....	133
Conveyor – reversing (option) .....	134
Conveyor – drive (option) .....	134
Conveyor belt – swivel bracket .....	135
Hydraulic cylinder .....	135
Check of funnel rubber – sealing rubber, side guides .....	136
Check of scraper tool, milling housing .....	136
<b>Maintenance – 250h .....</b>	<b>137</b>
Battery .....	137
Checking the electrolyte level .....	137
Coolant level – Check .....	138
Air filter – Change main filter .....	139
Air cleaner – Cleaning .....	140
Side plates, chassis leg – Check .....	140
Adjust the clearance .....	140
<b>Maintenance – 500h .....</b>	<b>141</b>
Diesel engine – Oil change – Filter replacement .....	141
Fuel filter – Replacement .....	142
Fuel filter – Bleeding the filter .....	143
Water separator, fuel prefilter – Replacement .....	143
Hydraulic reservoir cap – Check .....	144
Hydraulic hoses – Check .....	144
Clutch lining – Check .....	145
Water tank – Emptying/Cleaning .....	146
<b>Maintenance – 1000h .....</b>	<b>147</b>
Clutch bearing .....	147
Tightening torque bolted joints – Milling housing .....	148
<b>Maintenance – 2000h .....</b>	<b>149</b>
Hydraulic reservoir – Fluid change .....	149
High-pressure hydraulic filter – Replacement .....	150



## Contents

---

Return oil filter suction side – Replacement .....	151
Chassis leg, drive wheel – Planetary gear, oil draining .....	152
Drum gearbox – Oil change .....	152
Fuel tank – Drainage .....	153
<b>Disposal .....</b>	<b>154</b>
<b>Appendix .....</b>	<b>1</b>
<b>Appendix 1: Engine Fault Code .....</b>	<b>1</b>