

# Operator's Manual

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## *Combine*

*CEREA 7274*

*CEREA 7278*

*+ Auto Level*

*+ Rotary Separator*



# Operator's Manual

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<b>1</b>	<b>General Information</b>	<b>9</b>
1.1	Appropriate Use	11
1.2	Preface	12
1.3	Product Identification	13
1.4	Sectional Drawing and Parts Identification	14
<b>2</b>	<b>Safety</b>	<b>17</b>
2.1	General Safety Precautions	18
2.2	Attention - Warning Symbols	19
2.3	Safety Precautions	20
2.4	Road Transport	22
2.5	CE Marking and Type Plate on the Combine	23
2.6	Warning/Instruction decals	34
2.7	Position of CE Markings and Type Plate	39
<b>3</b>	<b>Operation, Controls and Cab</b>	<b>43</b>
3.1	Before Start	45
3.2	Operator Cab, Arrangement and Controls	48
	Optional Extra	50
3.3	Safety Precautions	51
3.4	Starting and Stopping the Engine	52
	Starting the engine	52
	Stopping the engine	53
3.5	Drive Controls	54
	Multi-Function Lever	54
	Adjustable Armrest	55
	Changing Gears	55
	Reduced Engine Revolutions in Road Transport (Speed Matching System)	56
	Steering column	57
	Brakes	57
	Adjustment of Operator Seat	58
	Adjustment of Air-Suspended Seat	58
	Ladder	59
	Removable Ladder	59
	Lights	60
	Main Light and Work Light	60
3.6	Operator Cab, Ventilation	61
	Air-Conditioning	61
	Using the Air-Conditioning	61
3.7	Printer	62
	Exchanging Paper and Ribbon in Printer	62
	Inserting the Paper Roll	62
	Fitting the Ribbon	62
3.8	Four-Wheel Drive	63
	Activating Four-Wheel Drive	63
	Forward Speed	63
	Operation of Four-Wheel Drive	64
	Service	64
3.9	Other Optional Extra	65
	Reversing Camera	65
	Electrically Adjustable Rearview Mirrors	65
<b>4</b>	<b>Operation, DATAVISION</b>	<b>67</b>
4.1	Safety Precautions	69
4.2	DATAVISION	71
	Menu Structure and Operation	71
	Operating DATAVISION on Terminal	72

# Contents

---

	Operating the Terminal by Remote Control in the Multi-Function Lever . . . . .	73
	Contrast and Brightness Control. . . . .	74
	Cleaning the Terminal. . . . .	74
	Data Cards . . . . .	75
	DATAVISION Menu Structure . . . . .	75
<b>4.3</b>	<b>Harvest Menu . . . . .</b>	<b>77</b>
<b>4.4</b>	<b>Main Menu . . . . .</b>	<b>81</b>
<b>4.5</b>	<b>Monitoring . . . . .</b>	<b>83</b>
	Shaft Speeds . . . . .	83
	Engine Monitoring/Alarm . . . . .	83
	Engine Safety Alarm . . . . .	84
	Information . . . . .	84
	Shaft Speeds . . . . .	85
<b>4.6</b>	<b>Harvesting Data . . . . .</b>	<b>87</b>
	Accumulated Machine Data,. . . . .	87
	Trip Data and Field Data,. . . . .	87
	4.6.1 Data Logging in General, . . . . .	88
	4.6.2 Using Data Logging . . . . .	90
	Creating a New Field Job . . . . .	90
	Starting a Job . . . . .	92
	Field Map for a Job. . . . .	94
	Data Logging Messages. . . . .	96
	4.6.3 Data Logging Setup . . . . .	98
	Marker Setup . . . . .	99
	Selecting Position Data. . . . .	100
	Setup of Logging Rate . . . . .	100
	4.6.4 Using Markers . . . . .	101
<b>4.7</b>	<b>Operator Manual . . . . .</b>	<b>103</b>
	Harvest Settings . . . . .	103
	Routine Servicing . . . . .	103
	DATAVISION. . . . .	103
<b>4.8</b>	<b>Diagnostics. . . . .</b>	<b>105</b>
	Electric. Diagnostics, . . . . .	105
	Yield Meter . . . . .	105
	System Information, . . . . .	105
	System Setup. . . . .	105
	Programming Computer, . . . . .	105
	Control, . . . . .	105
	GPS Information, . . . . .	106
	DGPS Information, . . . . .	107
	Programming . . . . .	109
	Diagnosis . . . . .	109
	Screen Calibration (Touch Calibration) . . . . .	109
<b>4.9</b>	<b>Coding, . . . . .</b>	<b>111</b>
	Clock Adjustment, . . . . .	111
	Language, . . . . .	111
	Area Measuring . . . . .	112
	Table Calibration . . . . .	113
	Returns Volume . . . . .	113
	Grain loss monitor. . . . .	113
	Concave Calibration . . . . .	114
	Constant Flow. . . . .	114
	Wheel Track and Auto Level Combine . . . . .	114
	Coding of Electrical Straw Deflectors. . . . .	115
	Straw chopper vibrations . . . . .	115
	Lead Time and Lag Time . . . . .	116
	Calibration of Actuator for Electrical Sieves . . . . .	117
<b>4.10</b>	<b>Settings. . . . .</b>	<b>119</b>
	Harvest Settings, . . . . .	119
	Table Settings. . . . .	122

Machine Settings, . . . . .	124
<b>4.11 Returns Volume Monitor. . . . .</b>	<b>126</b>
Coding, . . . . .	126
<b>4.12 Grain Loss Monitoring . . . . .</b>	<b>127</b>
Sensors . . . . .	127
Adjustment of Grain Loss Sensors, . . . . .	127
<b>4.13 Shaft Alarm Calibration. . . . .</b>	<b>128</b>
<b>4.14 Straw Chopper Vibrations. . . . .</b>	<b>129</b>
Coding . . . . .	129
<b>4.15 Yield Meter. . . . .</b>	<b>130</b>
4.15.1 Yield meter (Isotopic). . . . .	130
Measuring Principle . . . . .	130
Mass Flow Measuring . . . . .	130
Yield Meter Status . . . . .	131
Using the Yield Meter. . . . .	131
Calibration of Yield Meter . . . . .	131
4.15.2 Micro-Trak Yield Meter . . . . .	132
Measuring Principle . . . . .	132
Zero Point for Micro-Trak Yield Meter . . . . .	132
Calibration of Micro-Trak Yield Meter . . . . .	133
Slope Compensation for Micro-Trak Yield Meter . . . . .	133
4.15.3 Yield Meter Calibration. . . . .	134
<b>4.16 Moisture Meter . . . . .</b>	<b>136</b>
Continuous Moisture Measuring . . . . .	136
Measuring Principle . . . . .	136
Using the Moisture Meter . . . . .	136
Cleaning the Moisture Meter . . . . .	137
Calibration of Moisture Meter. . . . .	138
<b>4.17 Cutting Height Control . . . . .</b>	<b>140</b>
Cutting Height Control Setting and Operation . . . . .	140
Coding of Table. . . . .	141
<b>4.18 Field Pressure Control. . . . .</b>	<b>142</b>
Field Pressure Control Setting and Operation . . . . .	142
<b>4.19 Auto Level Table . . . . .</b>	<b>144</b>
Bleeding . . . . .	144
Coding of Auto Level Table. . . . .	145
Calibration of Table Angle. . . . .	145
<b>4.20 Operation of Auto Level Table . . . . .</b>	<b>146</b>
Manual Control. . . . .	146
Levelling at Turns . . . . .	146
<b>4.21 Interaction Between Table Controls. . . . .</b>	<b>147</b>
<b>4.22 Checking and Adjusting the Ground Sensors. . . . .</b>	<b>148</b>
<b>4.23 Constant Flow . . . . .</b>	<b>149</b>
Start-up and Adjustment of Constant Flow . . . . .	149
Constant Flow Engagement . . . . .	151
<b>5 Operation, Auto Level Combine . . . . .</b>	<b>153</b>
<b>5.1 Safety Precautions. . . . .</b>	<b>155</b>
Safety System . . . . .	156
<b>5.2 Combinations. . . . .</b>	<b>157</b>
Selecting Combination . . . . .	157
<b>5.3 Auto Level Combine . . . . .</b>	<b>158</b>
Manual Control of Auto Level Combine . . . . .	158
<b>5.4 Auto Level Combine/Table . . . . .</b>	<b>159</b>
Combine . . . . .	159
Transport, . . . . .	159
Auto Level table . . . . .	160
<b>5.5 Calibration of Auto Level Combine . . . . .</b>	<b>161</b>

# Contents

---

	Errors during Calibration . . . . .	162
<b>5.6</b>	<b>Coding of Auto Level Table . . . . .</b>	<b>162</b>
	Zero Cutting Height . . . . .	162
<b>5.7</b>	<b>Attachment/Removal of Table . . . . .</b>	<b>163</b>
<b>5.8</b>	<b>Operation of Auto Level Combine/Auto Level Table . . . . .</b>	<b>164</b>
	Combinations . . . . .	164
	Priority of Hydraulic Functions . . . . .	165
<b>5.9</b>	<b>Safety System, Auto Level . . . . .</b>	<b>166</b>
	Automatic Control of the Tilt Sensor Function . . . . .	166
	Safety System . . . . .	166
	Hose Breach Protection for Auto Level Hydraulics. . . . .	167
<b>5.10</b>	<b>Troubleshooting . . . . .</b>	<b>168</b>
	Mechanical Connections. . . . .	168
	Checking Sensor Adjustment and Inclinometer . . . . .	168
	Machine Not Levelling Correctly. . . . .	169
<b>5.11</b>	<b>Servicing and User Tips . . . . .</b>	<b>170</b>
	Retrofit of New DATAVISION Auto Level Job Computer and Sensors . . . . .	170
	Unintentional Use of Manual Keys in Automatic Mode . . . . .	170
	Diagnostics - Auto Level Combine Functions and Sensors . . . . .	170
<b>6</b>	<b>Engine . . . . .</b>	<b>171</b>
<b>6.1</b>	<b>Safety Precautions. . . . .</b>	<b>173</b>
<b>6.2</b>	<b>Engine Types . . . . .</b>	<b>174</b>
<b>6.3</b>	<b>Air-Intake . . . . .</b>	<b>174</b>
	Filter System. . . . .	174
<b>6.4</b>	<b>Cooling System . . . . .</b>	<b>175</b>
	Rotary Screen and Dust Aspirator . . . . .	175
	Coolers . . . . .	175
	Coolant . . . . .	176
	Checking the Fan Belt Tension. . . . .	176
<b>6.5</b>	<b>Fuel System . . . . .</b>	<b>177</b>
	Filter change. . . . .	178
<b>6.6</b>	<b>Engine Oil/Change. . . . .</b>	<b>179</b>
	Oil and Filter Change . . . . .	179
<b>6.7</b>	<b>Cleaning the Engine Compartment . . . . .</b>	<b>179</b>
<b>6.8</b>	<b>Electronic Engine Management . . . . .</b>	<b>180</b>
<b>6.9</b>	<b>Engine Trouble Shooting . . . . .</b>	<b>180</b>
	EEM3 Electronic Engine Management - Failure Codes (Self-Diagnosis) . . . . .	180
<b>7</b>	<b>Cutting Tables . . . . .</b>	<b>183</b>
<b>7.1</b>	<b>Safety Precautions. . . . .</b>	<b>185</b>
<b>7.2</b>	<b>Attachment of Table, Standard and Auto Level . . . . .</b>	<b>186</b>
	Alignment of Table . . . . .	187
<b>7.3</b>	<b>Removal of Table. . . . .</b>	<b>188</b>
	Table Trailer . . . . .	188
	Attachment of Combine and Trailer . . . . .	189
	Supports . . . . .	189
<b>7.4</b>	<b>Reel . . . . .</b>	<b>190</b>
	Reel Adjustment Up/Down, Fore/Aft . . . . .	190
	Bleeding . . . . .	190
	Reel Rotation . . . . .	191
	Reel Tine Bars. . . . .	191
	Adjustment of Reel in the Table. . . . .	191
<b>7.5</b>	<b>Knife . . . . .</b>	<b>192</b>
	Knife and Knife Drive . . . . .	192
	Knife Adjustment . . . . .	192
<b>7.6</b>	<b>Feeding . . . . .</b>	<b>193</b>

	Table Auger . . . . .	193
	Cut-Off Strip . . . . .	193
	Replacement of Feathering Fingers . . . . .	193
	Auger Flight Extensions, 20-22-25-30' Tables . . . . .	193
	Reversing . . . . .	194
<b>7.7</b>	<b>Transmission . . . . .</b>	<b>195</b>
	PowerFlow Table, Knife Drive and Table Auger . . . . .	195
	Slip Clutch for Table Auger . . . . .	195
<b>7.8</b>	<b>PowerFlow Table . . . . .</b>	<b>196</b>
	Inspection and Start-Up of PowerFlow Belts . . . . .	196
	Adjustment of Belts . . . . .	196
	Front Scrapers . . . . .	197
	Rear Scrapers and Adjustment of Bearing Housings . . . . .	197
	Table Bottom . . . . .	197
	Cleaning . . . . .	198
<b>7.9</b>	<b>Crop Lifters . . . . .</b>	<b>198</b>
	Using Crop Lifters . . . . .	198
<b>7.10</b>	<b>Vertical Knives, Rape Auger and Straw Dividers . . . . .</b>	<b>199</b>
	Vertical Knife . . . . .	199
	Mounting of Vertical Knife . . . . .	199
	Rape Auger . . . . .	199
	Torpedo Divider and Straw Divider Bow . . . . .	200
	Mounting of Straw Dividers . . . . .	200
	Adjustment of Torpedo Divider . . . . .	200
<b>7.11</b>	<b>Fixed Table Auger Fingers . . . . .</b>	<b>201</b>
	Using Fixed Table Auger Fingers . . . . .	201
	High Table Sides . . . . .	201
<b>7.12</b>	<b>Main crop elevator . . . . .</b>	<b>202</b>
	Crop Elevator Chain . . . . .	202
	Transmission for Table . . . . .	202
	Stone Trap . . . . .	202
	Initial Adjustment of Cutting Height Indication . . . . .	203
<b>8</b>	<b>Operation of Machine and Cutting Table . . . . .</b>	<b>205</b>
<b>8.1</b>	<b>Safety Precautions . . . . .</b>	<b>207</b>
<b>8.2</b>	<b>Operation of Table . . . . .</b>	<b>208</b>
	Table Height and Table Automatic Control . . . . .	208
	Cutting Height Control . . . . .	209
	Field Pressure Control . . . . .	209
	Preset Cutting Height . . . . .	210
	Auto Level Table . . . . .	210
	Table Engagement - Emergency Stop . . . . .	211
	Slip Clutch . . . . .	211
<b>8.3</b>	<b>Threshing Unit Transmission . . . . .</b>	<b>212</b>
	Threshing Unit Engagement . . . . .	212
	Cylinder Variator . . . . .	212
	Turning Tool for Cylinder . . . . .	213
<b>8.4</b>	<b>Concave Setting, Electrically Adjustable . . . . .</b>	<b>214</b>
	Operation of Concave . . . . .	214
	Concave Setting . . . . .	214
<b>8.5</b>	<b>Threshing . . . . .</b>	<b>216</b>
	Concave Filler Plates . . . . .	216
	Straw Walkers . . . . .	216
	Rear Beater Curtain . . . . .	217
<b>8.6</b>	<b>Straw Chopper and Spreader Hood . . . . .</b>	<b>218</b>
	Straw chopper . . . . .	218
	Adjustment of Spreader Hood . . . . .	219
	Counter Knives and Cross Bar . . . . .	220
	Replacement of Knives . . . . .	221

# Contents

---

<b>8.7</b>	<b>Fanning Mill and Sieves</b> .....	<b>222</b>
	Fanning Mill .....	222
	Shaker Shoe .....	222
	Shaker Shoe with Electrical Sieves.....	223
	Manual Adjustment of Sieves.....	223
	Cleaning of Sieves and Main Grain Pan .....	224
	Cleaning the Sieves .....	224
	Shaker Shoe Light.....	225
	Special Sieves.....	226
<b>8.8</b>	<b>Internal Grain Transport</b> .....	<b>227</b>
	Auger Housing/Elevators .....	227
	Returns Thresher .....	227
	Tank Filling Auger .....	228
	Grain Tank.....	229
	Unloading Auger .....	230
	Unloading Auger Clutch .....	230
	Unloading Tube.....	231
<b>8.9</b>	<b>Rotary Separator</b> .....	<b>232</b>
	Change of Rotor Revolutions .....	232
	Concave Setting .....	232
<b>8.10</b>	<b>Straw hood</b> .....	<b>233</b>
	Alarm switch for straw hood blocked.....	233
	Blockage in straw hood .....	233
<b>8.11</b>	<b>Chaff Spreader</b> .....	<b>234</b>
	Setting .....	234
<b>8.12</b>	<b>Maize Threshing</b> .....	<b>235</b>
	Attachment of Maize Header .....	235
	Area measuring.....	235
	Main crop elevator .....	236
	Concave/Cylinder/Stone Trap .....	236
	Concave/Initial Settings .....	236
	Threshing cylinder.....	236
	Rotary separator .....	237
	Shaker Shoe .....	237
	Machine with Electrical Sieves.....	237
	Straw walkers.....	237
	Bottom Auger Cover Plate .....	238
	Scrapers .....	238
	Rear Beater Curtain .....	238
	Straw chopper .....	238
<b>8.13</b>	<b>Suggested Harvest Settings</b> .....	<b>239</b>
<b>8.14</b>	<b>Threshing</b> .....	<b>240</b>
<b>9</b>	<b>Transmissions</b> .....	<b>241</b>
<b>9.1</b>	<b>Safety Precautions</b> .....	<b>243</b>
<b>9.2</b>	<b>Adjustment of Transmissions</b> .....	<b>244</b>
	General .....	244
	Threshing Unit Clutch .....	244
	Hydrostatic Transmission .....	244
<b>9.3</b>	<b>Transmissions</b> .....	<b>245</b>
	Rear Beater.....	245
	Main Crop Elevator and Table.....	245
	Straw chopper .....	245
	Threshing cylinder.....	246
	Unloading Auger .....	246
	Shaker Shoe and Chaff Spreader Counter Drive, and Straw Walker Drive.....	247
	Filling and Returns System Countershaft, .....	248
	Returns Elevator and Returns Thresher .....	248
	Tank Filling Elevator and Tank Filling Auger .....	249



	Dust aspirator .....	249
	Rotary screen .....	250
	Fanning Mill .....	251
	Rotary Separator .....	251
	Alternator and Fan, .....	251
	Air-conditioning .....	252
<b>9.4</b>	<b>Transmission Diagram, Left-Hand Side .....</b>	<b>254</b>
<b>9.5</b>	<b>Transmission Diagram, Right-Hand Side .....</b>	<b>256</b>
<b>10</b>	<b>Hydraulics .....</b>	<b>259</b>
<b>10.1</b>	<b>Safety Precautions .....</b>	<b>261</b>
<b>10.2</b>	<b>Hydraulic System, Standard Combine .....</b>	<b>262</b>
	Hydrostatic Transmission .....	262
<b>10.3</b>	<b>Hydraulic System, Four-Wheel Drive .....</b>	<b>263</b>
	Hydrostatic Transmission .....	263
<b>10.4</b>	<b>Oil Change .....</b>	<b>264</b>
	Draining Oil .....	264
	Refilling Oil .....	264
<b>10.5</b>	<b>Filter Change .....</b>	<b>265</b>
	Return Oil Filter .....	265
	Storage of Hydraulic System .....	265
<b>10.6</b>	<b>Auxiliary Hydraulics .....</b>	<b>266</b>
	Functions and Auxiliary Hydraulics .....	266
	Reel Adjustment Fore/Aft - Up/down .....	266
<b>10.7</b>	<b>Hydraulics Diagram, Standard Combine .....</b>	<b>268</b>
<b>10.8</b>	<b>Hydraulics Diagram, Auto Level Combine .....</b>	<b>270</b>
<b>10.9</b>	<b>Hydraulics Diagram for Chaff Spreader .....</b>	<b>272</b>
<b>11</b>	<b>Maintenance .....</b>	<b>273</b>
<b>11.1</b>	<b>Safety Precautions .....</b>	<b>275</b>
<b>11.2</b>	<b>Undercarriage .....</b>	<b>277</b>
	Wheel Nut Torques .....	277
<b>11.3</b>	<b>Tyre Pressure .....</b>	<b>278</b>
<b>11.4</b>	<b>Lubrication Chart .....</b>	<b>280</b>
	Daily/10 Hours (Red) .....	280
	50 hours (blue) .....	280
	100 hours (yellow) .....	280
	200 hours (white) .....	281
	11.4.1 Lubrication Chart .....	282
	11.4.2 Lubrication Points, Auto Level Combine .....	284
<b>11.5</b>	<b>Lubricants and Operating Fluids .....</b>	<b>285</b>
<b>11.6</b>	<b>Maintenance Required .....</b>	<b>286</b>
<b>11.7</b>	<b>Gear Oil Change .....</b>	<b>288</b>
	Gearbox .....	288
	Final Drives .....	288
<b>11.8</b>	<b>Air-Conditioning .....</b>	<b>289</b>
	Diagram for air-conditioning .....	289
	Maintenance .....	289
<b>11.9</b>	<b>Cleaning and Off-Season Storage .....</b>	<b>290</b>
	Cleaning .....	290
	Off-season storage .....	291
	Storage of Engine, Fuel System and Hydraulic System .....	292
	Periodical Start-Up .....	292
	Removal of Main Crop Elevator .....	293
	Removal of Elevator Chains .....	293
	After Off-Season Storage .....	293
<b>11.10</b>	<b>Adjustment of Brakes .....</b>	<b>294</b>

# Contents

---

Adjustment of Foot Brakes, Disc Brakes . . . . .	294
Adjustment of Parking Brake, Drum Brake . . . . .	294
<b>11.11 Dealer Servicing Schedule for CEREА Combine Range. . . . .</b>	<b>295</b>
<b>12 Electrical System . . . . .</b>	<b>301</b>
12.1 Safety Precautions . . . . .	303
12.2 Electrical System . . . . .	304
Charging System . . . . .	304
Electric Boxes and Main Switch . . . . .	304
12.3 External 12V connectors . . . . .	305
12.4 Electro-Hydraulic System . . . . .	307
Hydraulic safety . . . . .	307
12.5 Key to Signatures for Wiring Harness . . . . .	308
Wire Codes . . . . .	308
Component Codes . . . . .	308
12.6 Position of Connectors in Electric Box . . . . .	309
12.7 Fuses and Relays, Electric Box and Cab . . . . .	310
12.8 Key to Symbols . . . . .	312
12.9 Fuses, Alphabetical . . . . .	313
12.10 Fuse Ratings . . . . .	314
12.11 W-Connecting Points . . . . .	315
12.12 Diagrams survey . . . . .	316
12.13 Diagrams . . . . .	319
<b>13 Specifications . . . . .</b>	<b>365</b>
13.1 Dimensions and Specifications . . . . .	365
<b>14 Index . . . . .</b>	<b>369</b>

# 1. General Information

---

## Contents

1.1	Appropriate Use.....	11
1.2	Preface .....	12
1.3	Product Identification .....	13
1.4	Sectional Drawing and Parts Identification.....	14

# 1. General Information

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# 1. General Information

## 1.1 Appropriate Use



### **Appropriate use:**

This self-propelled combine harvester is manufactured exclusively for usual agricultural purposes (appropriate use).

Any other use is considered as being contrary to the appropriate use. AGCO declines all liability in cases of physical damage or injuries resulting from non-appropriate use. The risk lies exclusively with the user.

The conformity and strict adherence to the operating, maintenance and repair requirements specified by AGCO are also essential factors for appropriate use.

This self-propelled combine harvester may be used, serviced and repaired only by personnel having full knowledge of its specific features and who are aware of the danger involved and the applicable safety rules (prevention of accidents).

It is the responsibility of the owner/user to ensure that prescribed safety precautions and other general technical, health and safety and road-safety rules are observed.

AGCO disclaims all liability to any claim resulting from the fitting of non-approved parts or accessories or unauthorised modification or alteration.

Customers are strongly recommended to contact an AGCO dealer in the event of after-sale problems and for any adjustments that may be necessary.

*In accordance with the Company's policy of continuous improvements to its products, alterations in the specifications may be made at any time without notice.*

*The Company accepts no responsibility for any discrepancies which may occur between the specifications of its machines and the descriptions thereof contained in its publications.*

*This machine has been designed and produced in conformity with the machine directive 98/37/EF. An EU declaration of conformity is supplied with the machine.*

This machine has been tested according to the  
**EEC directive 77/311/EEC and ISO 5131-1982**

Noise level: MF 7274 RS = 78 dB (A)

Noise level: MF 7278 RS = 78 dB (A)

# 1. General Information

---

## 1.2 Preface

### **This Manual**

The purpose of this manual is to enable the owner/operator to handle and maintain the combine efficiently. Time spent in becoming familiar with the Operator's Manual now will save time in the field.

Wide variations in operation conditions make it impossible for the Company to make comprehensive or definite statements in its publications concerning performance and the use of its machines, or to accept liability for any damage which may result from errors or omissions.

The specifications and illustrations contained in this manual pertain to combines manufactured for specific countries. Due to differing laws and requirements in various countries, some apparent discrepancies may result between any particular combine and those depicted in this manual. Some accessories and optional equipment appearing in this manual are not necessarily available in all territories.

### **AGCO service**

During the warranty period, all maintenance and repair work must be carried out by the AGCO dealer who will carefully carry out detailed checks of the progress and performance of the new combine.

To obtain best results from an AGCO combine, it is important to continue regular servicing and periodical inspection after the warranty has expired. All major overhaul work on the combine must be carried out by a local AGCO dealer; an experienced technician will detect any problems which may arise between two overhauls.

Mechanical staff regularly follow training courses to update their knowledge of the product, maintenance and repair techniques and the use of special modern tools and equipment for troubleshooting. They receive regular Service Bulletins and have access to all the workshop manuals and technical publications required to carry out repairs or maintenance meeting the quality standards required by AGCO.

### ***Warning concerning spare parts***

Parts other than original AGCO parts are likely to be of lower quality. AGCO disclaims all liability in the event of loss or damage arising as a result of such parts being fitted. The manufacturer's warranty may also become void, if such parts are fitted during the normal warranty period.

### **Warranty, pre-delivery check and installation**

The Company, when selling new goods to its Distributors, gives a warranty which, subject to certain conditions, guarantees that the goods are free from defects in material and workmanship. The Company's Distributors and Dealers are required to give the benefit of a similar warranty to the first retail purchaser of all new goods supplied by the Company, and users should inquire of the Distributor or Dealer from whom they purchase as to the terms of the warranty made available to them.

Before delivering a new combine to the Customer's premises, it is the responsibility of the Distributor to conduct a pre-delivery check of the machine. This consists of a series of detailed inspections, adjustments and functional checks, which should ensure that when received by the Customer the combine is ready to start work immediately.

Upon delivery the Distributor is required to instruct the Customer in the basic principles and operating procedures of the combine. This is termed Combine Installation, which should include instruction on controls and instruments, field settings, maintenance requirements, safety precautions and winter storage, and should preferably be undertaken in the presence of all who will be concerned with the operation and maintenance of the machine.

This manual is published for World wide distribution, and the availability of equipment shown either as basic or accessory varies according to the territory in which the combine is to be used. Details of equipment available in your area can be obtained from your AGCO Distributor/Dealer.

# 1. General Information

## 1.3 Product Identification

Always quote combine model and serial number in any communication to your Distributor/Dealer.

Keep this manual safely for convenient reference.

Combine model: MF \_\_\_\_\_

Serial number: \_\_\_\_\_

Table serial number: \_\_\_\_\_

Engine type: \_\_\_\_\_

Serial number: \_\_\_\_\_

Owner's name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Installation date: \_\_\_\_\_

Dealer's name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_



Fig. 1



Fig. 2

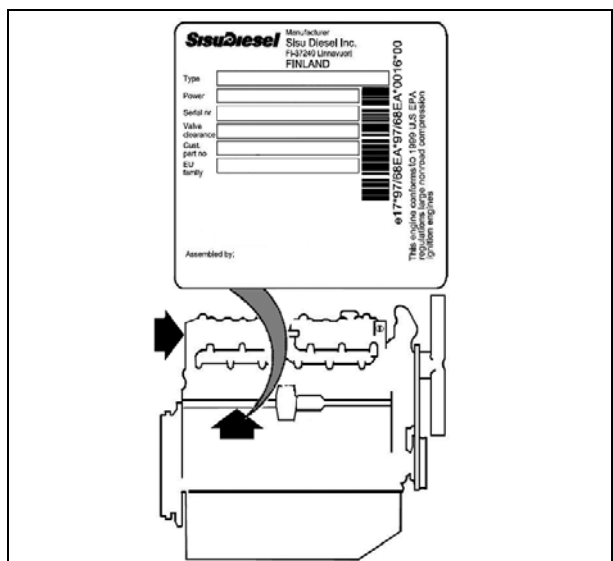


Fig. 3

# 1. General Information

## 1.4 Sectional Drawing and Parts Identification

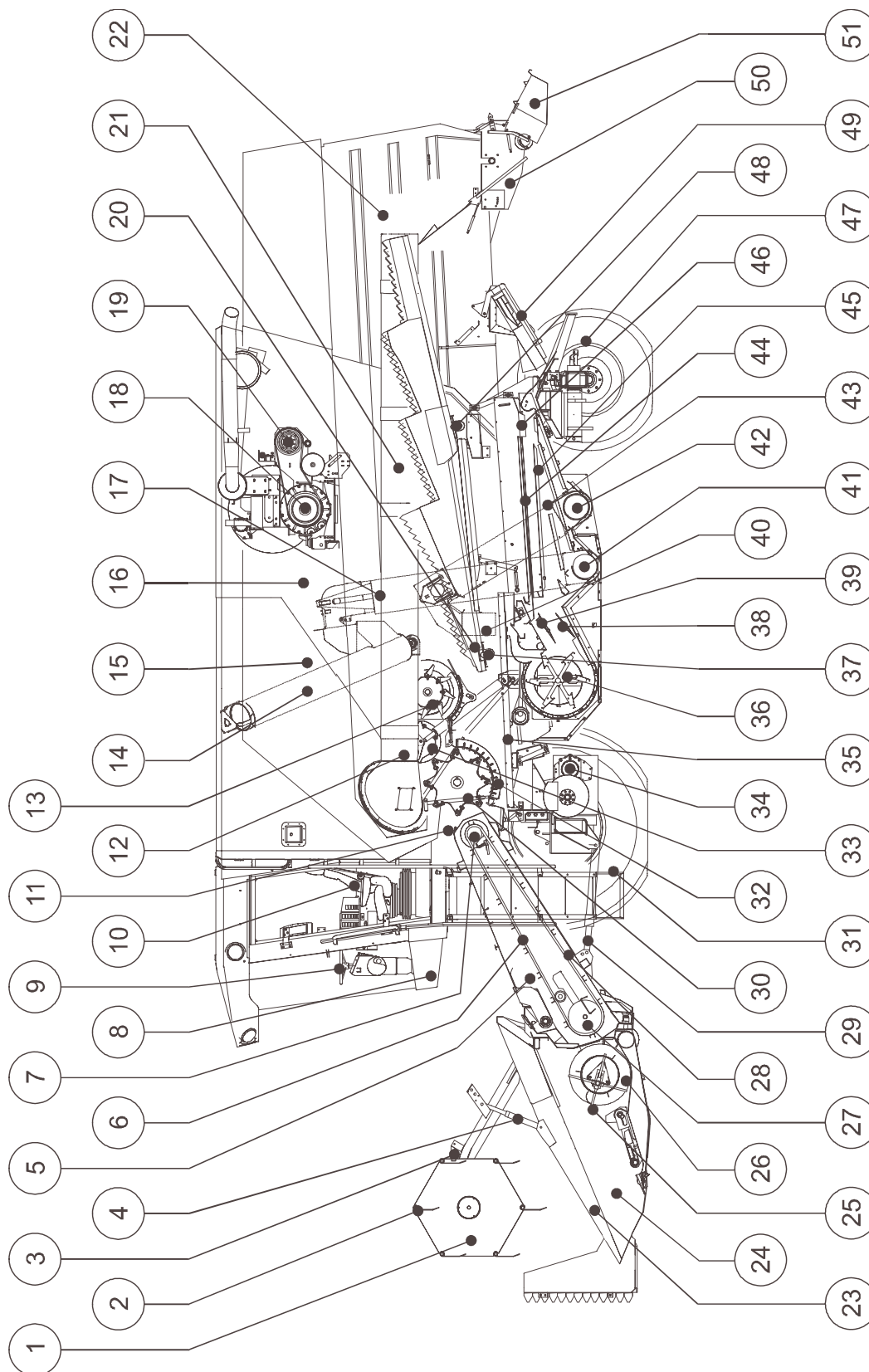


Fig. 4



# 1. General Information

Combine parts		
1. Reel	18. Engine	35. Main grain pan
2. Reel tine bars	19. Hydrostatic pump (transmission)	36. Fanning mill
3. Hydraulic ram for reel fore/aft	20. Straw walkers	37. Straw walker front crank
4. Hydraulic ram for reel up/down	21. Unloading tube	38. Bottom fan deflector
5. Main crop elevator	22. Straw hood	39. Top fan deflector
6. Crop elevator chain	23. Straw divider	40. Returns thresher
7. Elevator chain top shaft	24. Table	41. Good grain auger
8. Operator cab	25. Feathering fingers	42. Returns auger
9. Steering wheel	26. Table auger	43. Shaker shoe
10. Operator seat	27. Elevator chain front shaft	44. Top sieve
11. Cylinder access door	28. Elevator chain slats	45. Bottom sieve
12. Unloading auger/tube	29. Hydraulic table lift ram	46. Sieve extension
13. Rotary separator	30. Threshing cylinder	47. Rear wheels
14. Tank filling auger	31. Traction wheels	48. Straw walker rear crank
15. Grain tank	32. Concave	49. Chaff spreader
16. Rear beater curtain	33. Rear beater	50. Straw chopper
17. Tank filling elevator	34. Hydrostatic motor (transmission)	51. Spreader hood

Fig. 5

# 1. General Information

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### Contents

2.1	General Safety Precautions .....	18
2.2	Attention - Warning Symbols.....	19
2.3	Safety Precautions.....	20
2.4	Road Transport .....	22
2.5	CE Marking and Type Plate on the Combine.....	23
2.6	Warning/Instruction decals.....	34
2.7	Position of CE Markings and Type Plate .....	39

## 2. Safety

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### 2.1 General Safety Precautions



*Every effort has been made to ensure that Massey Ferguson combines provide maximum protection against personal injury through accidents. The effectiveness of guards and other safety devices is only as comprehensive as the operator allows in practising caution whenever the machine is running. Reading the simple rules below is only part of your responsibility. Memorise them and practise them until you are continually safety conscious. In order to provide a better view, certain photographs or illustrations in this manual may show an assembly with the safety shield removed. However, a machine should never be operated in this condition. Keep all shields in place. If a shield removal becomes necessary for repairs, replace the shield prior to machine operation.*

*Operators should familiarise themselves with the provisions of the Road Traffic Acts and of the regulations made thereunder in order to ensure that, when taking the combine and the attachments upon the road, they comply with the relevant statutory requirements. Always remember to observe the restrictions on the use of vehicles carrying projection loads or appliances.*

*The machine is delivered from the factory with guards and safety equipment as required by the authorities.*

### 2.2 Attention - Warning Symbols

Read Operator's Manual and safety precautions thoroughly before starting! (Note decals on the machine!)

All persons using or involved with service or maintenance of this table should familiarise themselves with the safety precautions!

#### **Provisions Concerning Safety and Prevention of Accidents**

Before starting check the combine with a view to road safety and reliability.

**Note this symbol in this operator's manual, it's for your own safety:**



## 2. Safety

---

### 2.3 Safety Precautions



**Attention! Become alert! Your safety is involved**

#### Safety precautions are for your safety

1. In addition to the instructions stated in this operator's manual it is the responsibility of the user to observe general safety provisions and regulations for the prevention of accidents.
2. Warnings and instructions on the machine give important information as to safe use. They are for your own safety and must be closely observed.
3. In road transport it is the responsibility of the user to observe the current provisions concerning forward speed, total weight, axle load, transport dimensions, safety equipment, safety guards, warnings and lights.
4. Before starting the operator should familiarise himself thoroughly with the machine functions and their operation, not least for his own safety. It may be too late once the machine is at work!
5. Keep a safe distance from rotating parts. Never wear loose clothes when combining.
6. Keep the machine clean to avoid fire hazard.
7. Check the immediate surroundings before starting (children!). Be sure to have a clear view. Never start the machine until persons near the machine are aware of your intentions to start.
8. Never allow any passengers on the machine when driving.
9. Before starting the engine make sure the machine is in neutral and that all safety guards are fitted and secured.
10. Start the engine only from the operator seat. Never start by short-circuiting the electronic connections at the starter, as the machine may then start moving instantly.
11. Never let the engine run in a closed room.
12. Handle fuel with caution. Fire hazard. Smoking and open fire should be avoided when refuelling.
13. Always stop the engine and remove the ignition key before refuelling. Never refuel in a closed building. Remove spilled fuel immediately.
14. Handle brake fluid and battery acid with caution (noxious and caustic).
15. Never leave the operator platform on the move.
16. The forward speed must always be adapted to ground conditions. Avoid abrupt turns when driving up- or down-hill or across steep slopes.
17. The combine may be transported on roads only with an empty, closed grain tank.
18. Never leave the combine without securing it against rolling (hand brake/sprags under the wheels). Stop the engine, remove ignition key and main switch handle and lock the cab.
19. Never leave the combine unattended when the engine is running.
20. Before leaving the combine lower the table completely.
21. Never work on or under the table in raised position without securing it with all safety stops.
22. Be particularly cautious when mounting/dismounting the table and when attaching the table trailer.
23. As the function of table, maize header, table auger, elevator chain, knives, reel, etc. does not permit complete shielding, be sure to keep safe distance from these parts during test and work.
24. Make sure that the P.T.O. shaft is always properly fitted when the table is attached.
25. The straw chopper rotor will keep moving for some time after the chopper has been disengaged. Therefore keep safe distance until the chopper has stopped completely.
26. As the function of the grain tank augers does not permit complete shielding, always use suitable tools (rod or the like) to remove accumulated material in the grain tank.
27. Never enter the grain tank without stopping the engine and removing the ignition key from the switch, to prevent that the machine is started unintentionally.
28. Before any repair, maintenance, cleaning or correction of functional faults is carried out, stop the engine and disengage the threshing unit. **Remove the ignition key from the switch.**
29. Fluid under high pressure (fuel, hydraulic oil, etc.) spraying out may penetrate your skin and cause severe injury. In that case, see a doctor immediately. Risk of infection!
30. Before carrying out any service or repair on the hydraulic system, make sure the particular function is lowered/relieved (without pressure).
31. Repair of the hydraulic system to be carried out only by a specialist workshop.
32. Before carrying out any work on the electrical system, remove ignition key and main switch handle.
33. Before carrying out any electric welding on machine or table, dismantle the alternator cables and remove the main switch handle.
34. Always remove the radiator cap with greatest caution when the engine is warm. The radiator is under pressure and scalding hot water may splash out.
35. Dispose of oil, fuel and filters in a safe way.
36. Check braking before each start.
37. Check the brake system regularly and thoroughly.
38. Adjustment and repair of the brake system to be carried out only by specialist workshops or authorised brake specialists.
39. Fitting of tyres may be carried out only by specialists with special tools and sufficient knowledge of tyre fitting.

40. When working on tyres and wheels make sure that the machine stands firmly on the ground and is secured against rolling (sprags under the wheels).
41. Repair of tyres and wheels to be carried out only by specialists.
42. Check tyre pressure regularly. Observe prescribed tyre pressure.
43. Check bolts and nuts regularly and retighten if required.
44. Keep safe distance from low-hanging mains (be aware of the aerial, if any).
45. Repair and maintenance of the air-conditioning system to be carried out only by specialist workshops. Avoid smoking during repair and maintenance.
46. To avoid health/respiratory hazard to the operator it is recommended that accumulated debris is removed by vacuuming and supplemented use of effective respiratory protective equipment (UK: EN149:FFP2S or better).
47. In situations where cleaning by use of vacuuming is impossible and pressurised air or water is used alternatively, the operator should protect himself by using effective respiratory protective equipment in accordance with national regulations (UK: COSHH 1994).
48. Dismounted, defective combine parts, used oil and other fluids must be disposed of in accordance with current environmental regulations. When replacing machine components during the warranty period, observe the Massey Ferguson Warranty conditions.

## 2. Safety

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### 2.4 Road Transport

It is the responsibility of the owner/user that cutting table and machine are fitted with the equipment required in the country and driven according to the regulations in force for road transport.

1. Safety guards, traffic lights, rotating beacon, reflectors, warning triangle must be fitted and in transport position.
2. Brake, steering gear, and other safety equipment must comply with the relevant statutory requirements.
3. Rules governing maximum width, length, height and total weight must be observed.
4. Rules governing driver's licence and insurance must be observed.
5. Table and table trailer must be attached and secured according to regulations.
6. In transport the forward speed of the machine must not exceed the speed limit prescribed by law, irrespective of the conditions.

**Note:** *To avoid accidents, all persons engaged in operation, maintenance, repair and testing of this machine should familiarise themselves with the recommendations and warnings in this operator's manual. The sections, **Safety Precautions** and **Before Start**, are particularly important.*

**Please also note:**

If the combine is equipped with maize header or other special header, the rules in force on the use and transport of such headers must be observed.

The use of spare parts, accessories and additional implements which are not genuine and not tested and approved by the manufacturer may cause changes in machine function and thus affect work and road safety (safety guards).

The manufacturer accepts no liability for any loss or damage which may result from the use of non-original parts, accessories or implements.

Technical specifications, dimensions and weights are without any obligation.

Right to change technical specifications and equipment reserved.

Front, rear, RH and LH are always seen in the travelling direction.



### 2.5 CE Marking and Type Plate on the Combine

See drawings at the end of this chapter.

**IMPORTANT:** Renew decals that have been damaged, lost, painted out or otherwise have become illegible. If components that originally held decals, are replaced make sure that new decals are mounted on the new components.

**Note:** New decals can be ordered from your dealer.

Type Plate 1, [\(Fig. 1\)](#)  
Frame No./CE Marking

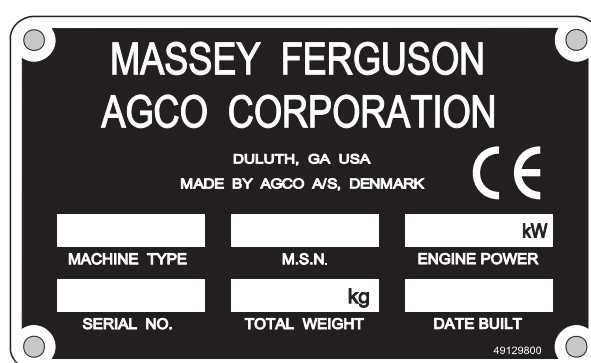


Fig. 1

Decal 2, [\(Fig. 2\)](#)

Carefully read the operator's manual before putting the combine into use. Observe instructions and safety precautions during work.

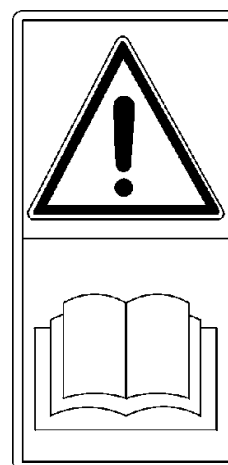


Fig. 2

## 2. Safety

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### *Decal 3, (Fig. 3)*

Shut off engine and remove ignition key before performing maintenance or repair work.

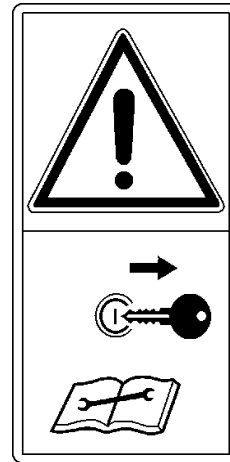


Fig. 3

### *Decal 4, (Fig. 4)*

Sound the horn twice before starting the engine.

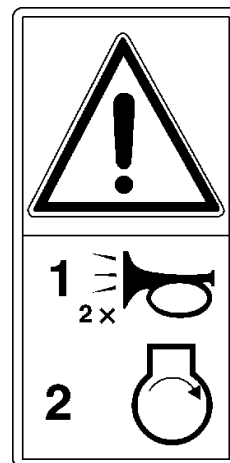


Fig. 4

### *Decal 5, (Fig. 5)*

Do not ride on platform or ladder.



Fig. 5

# 2. Safety

**Decal 6, (Fig. 6)**

Avoid fluid escaping under pressure. Consult technical manuals for service procedures.

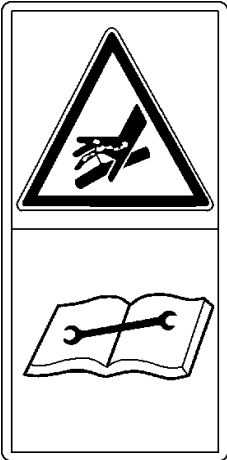


Fig. 6

**Decal 7, (Fig. 7)**

Never reach nor climb into grain tank while engine is running.



Fig. 7

**Decal 8, (Fig. 8)**

Do not open or remove safety shields while engine is running.

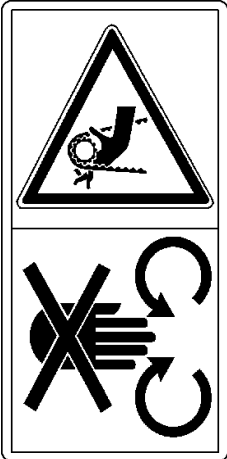


Fig. 8

## 2. Safety

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*Decal 9, (Fig. 9)*

Danger - stay clear of rotating machine parts.

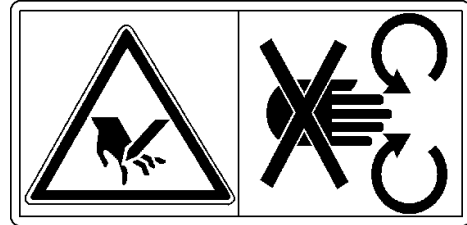


Fig. 9

*Decal 10, (Fig. 10)*

Stay clear of danger area between front attachment and engine.



Fig. 10

*Decal 11, (Fig. 11)*

Do not open or remove safety shields while engine is running.

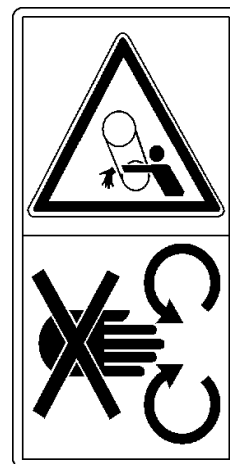


Fig. 11

# 2. Safety

**Decal 12, (Fig. 12)**

Danger - stay clear of rotating machine parts.

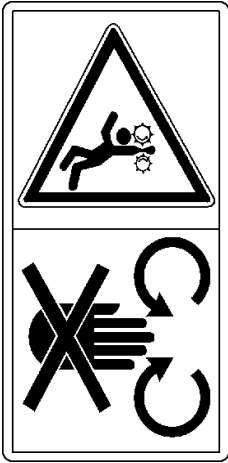


Fig. 12

**Decal 13, (Fig. 13)**

Secure the lifting rams with locking devices before getting in the dangerous area beneath table, main crop elevator or reel.

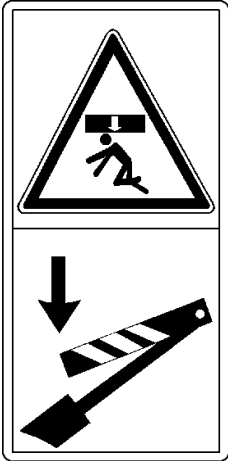


Fig. 13

**Decal 14, (Fig. 14)**

Never reach into rotating auger.

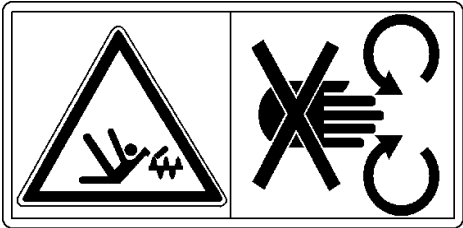


Fig. 14

## 2. Safety

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*Decal 15, (Fig. 15)*

Wait until all machine components have stopped completely before touching them.

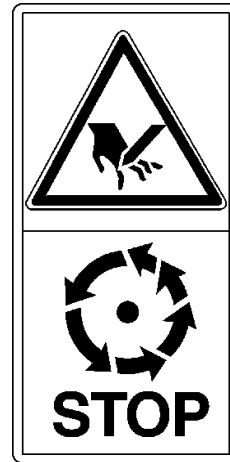


Fig. 15

*Decal 16, (Fig. 16)*

Stay clear of straw chopper while engine is running



Fig. 16

*Decal 17, (Fig. 17)*

Do not reach into straw walkers while engine is running.

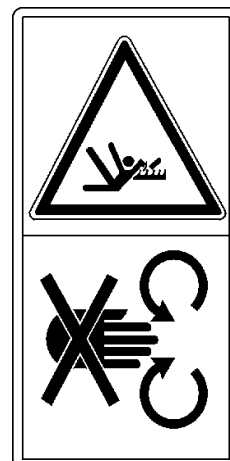


Fig. 17

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