

# SERVICE MANUAL

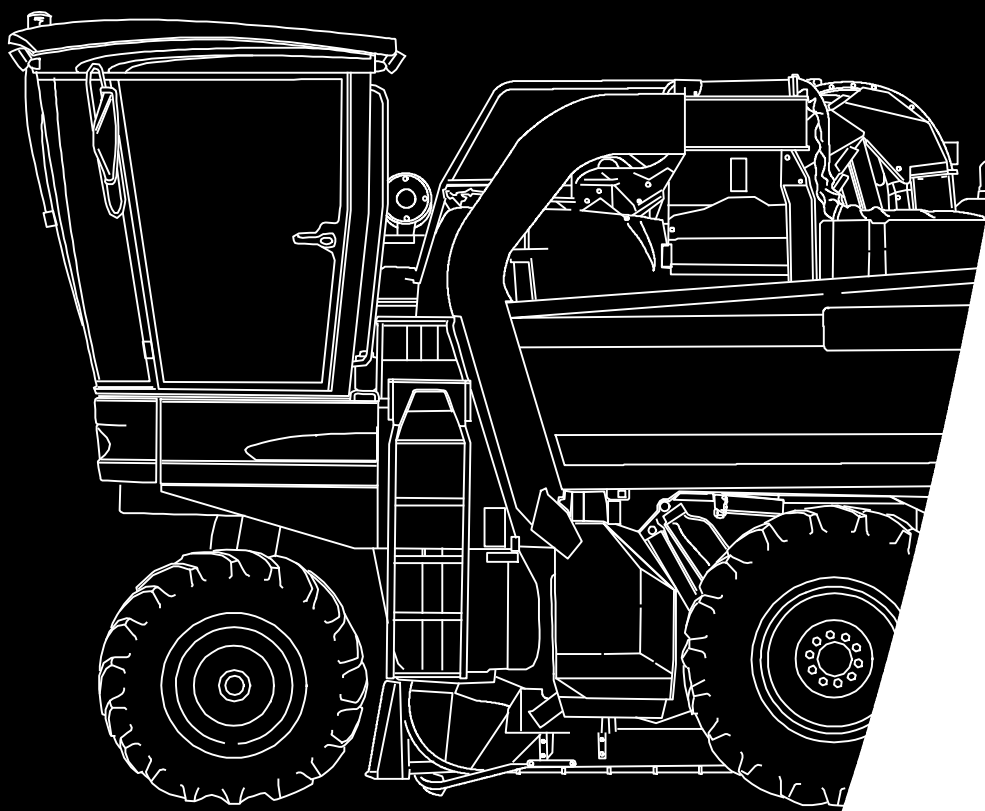
## VX7090 Grape Harvester

Print No. 84404824B



# REPAIR MANUAL

**NEW HOLLAND**  
**VX7090**



**NEWHOLLAND**



Previous name	New name
Up to series 006	Starting from series 007
<b>VX 680</b>	<b>VX 7090</b>
One cab with roll-over-protection structure "ROPS" will be installed starting from series 014	

## REPAIR MANUAL

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**NOTE:** this manual contains the description of VX models starting from the first series.

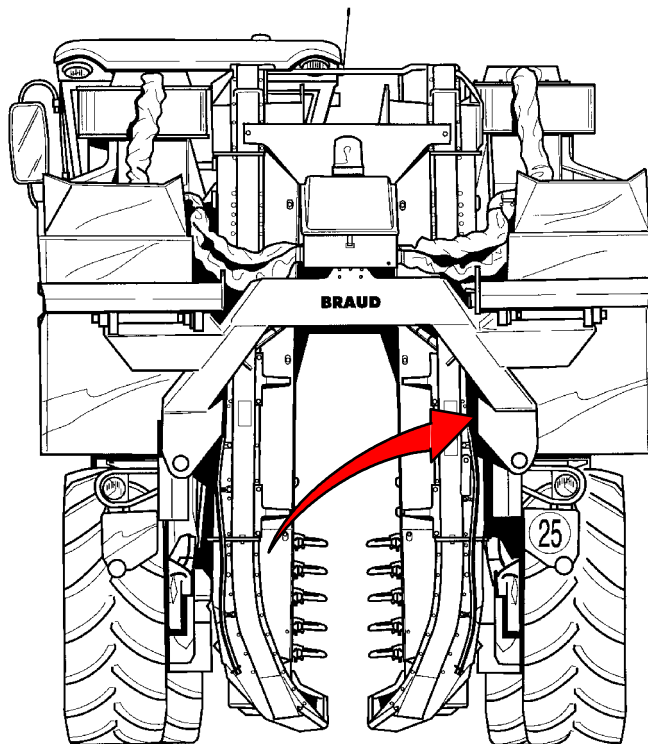
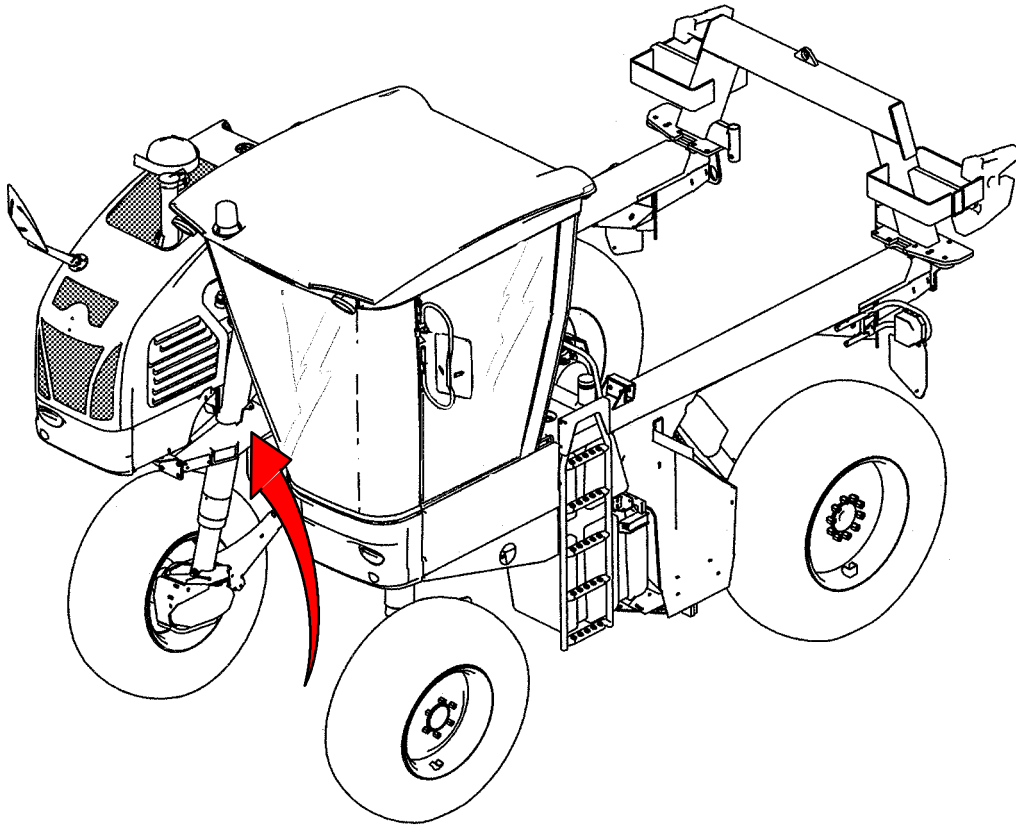
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# SPECIFICATIONS

## Chapter 1

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## MACHINE IDENTIFICATION DATA

Model	Type	Serial no.	Machine number
VX 680	665	001	001
Harvesting equipment	666	001	001
Harvesting equipment starting from series 002	665	002	001
VX 7090 Self-propelled and harvesting equipment	665	007	001

**NOTE:** the harvesting equipment number is the same as the self-propelled machine one starting from series 003.

New numbering starting from the installation of cabs with roll-over-protection structure "ROPS", series 014

H A G	00	665	E	00	014	001
COEX code	Free = 00	Type	Code letter	Free	Series	Number

**A = Manufacturer's label**

**B = Printed frame number**

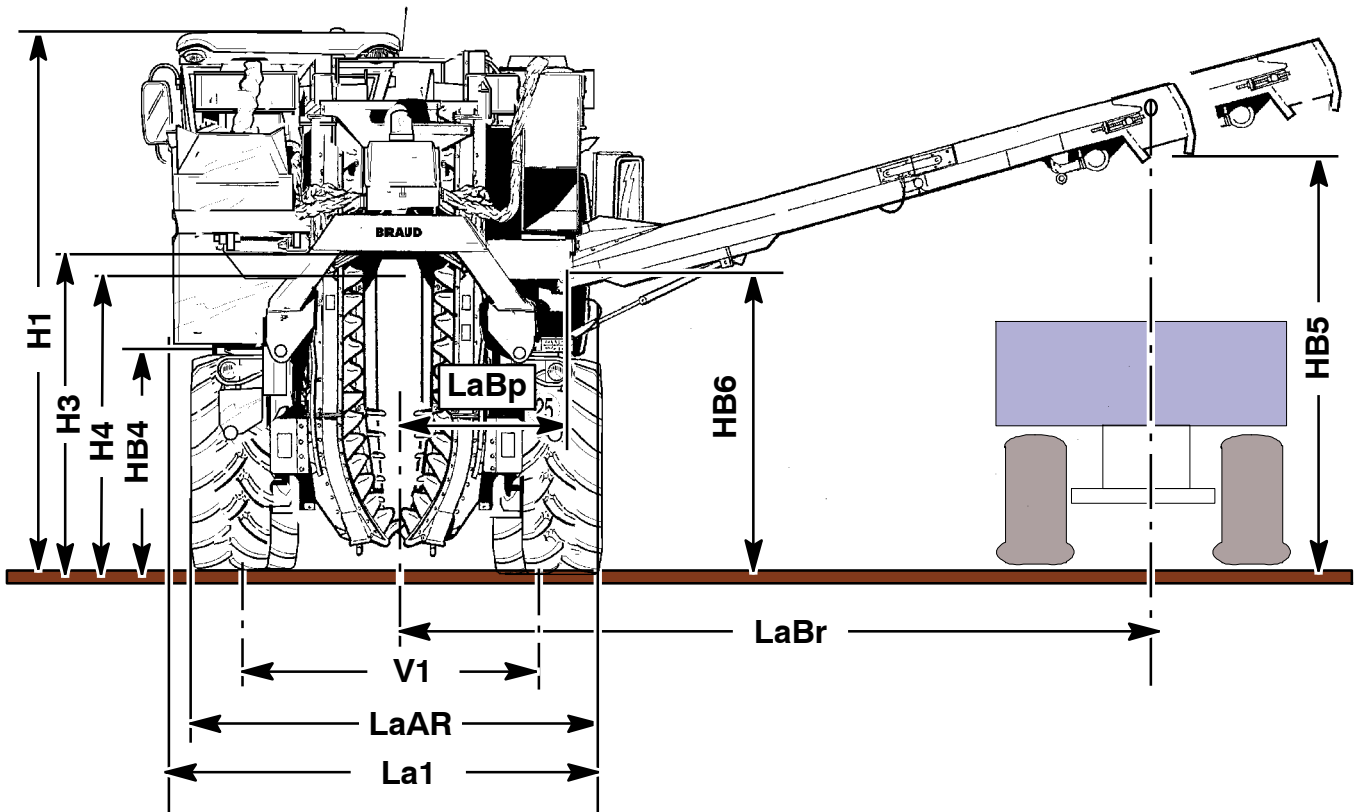
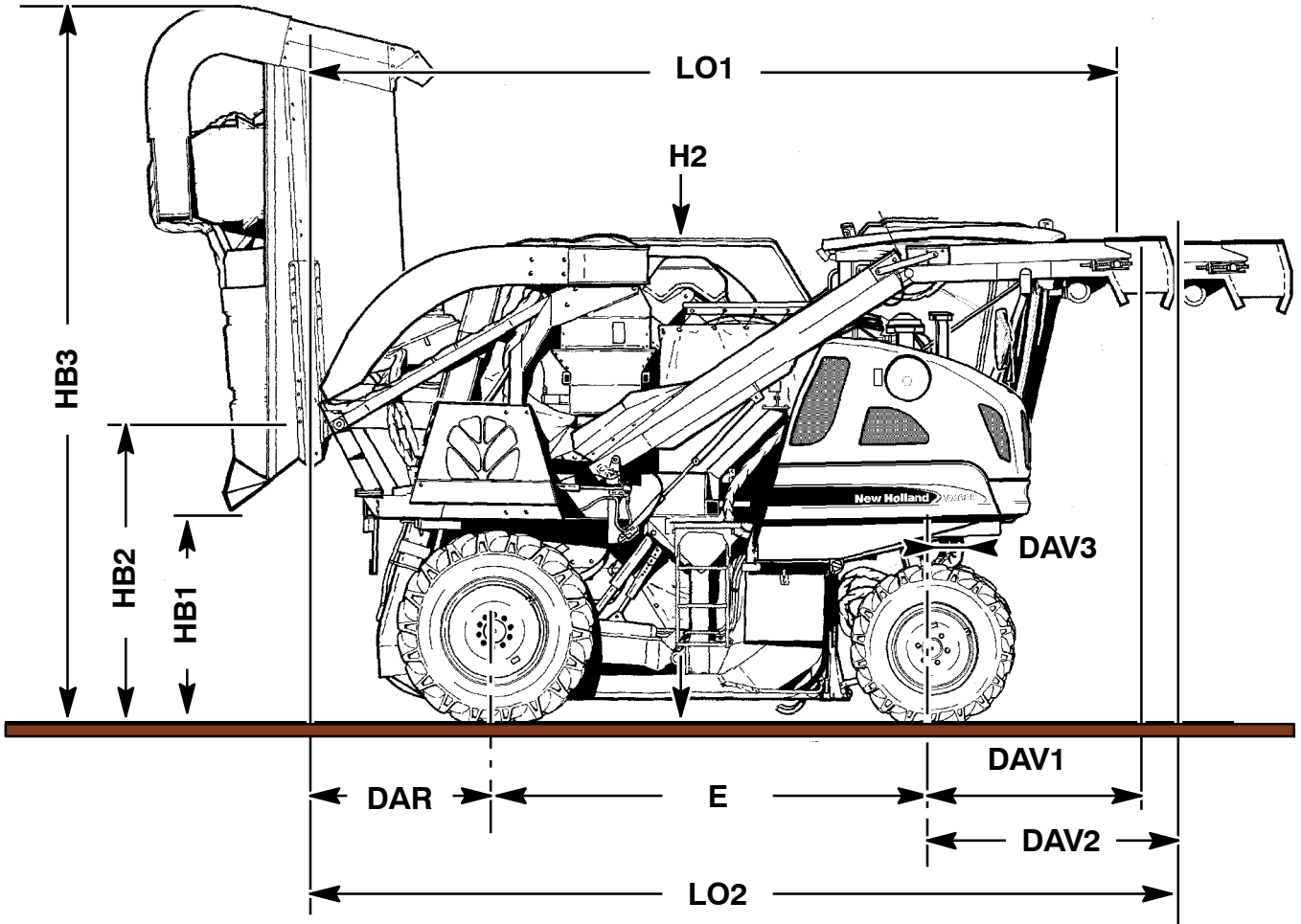
## OPERATORS MANUAL

Reference VX OLIVES	Reference VX 7090
84369870 (F)	84234146 (I)
84383525 (GB)	84234147 (GB)
84369872 (SP)	84234148 (F)
84369874 (PO)	84234149 (SP)
	84234150 (PO)

## REPAIR MANUAL

French: 84404823, English: 84404824, Italian: 84404825, Spanish: 84404826

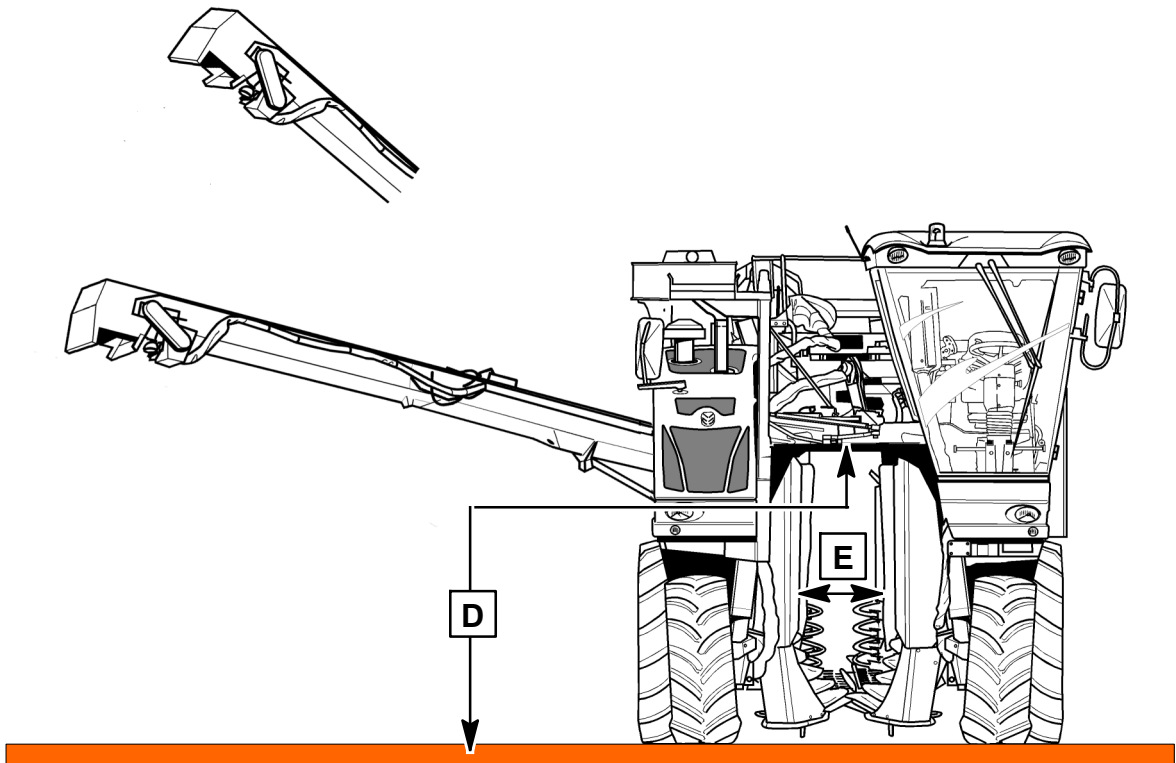
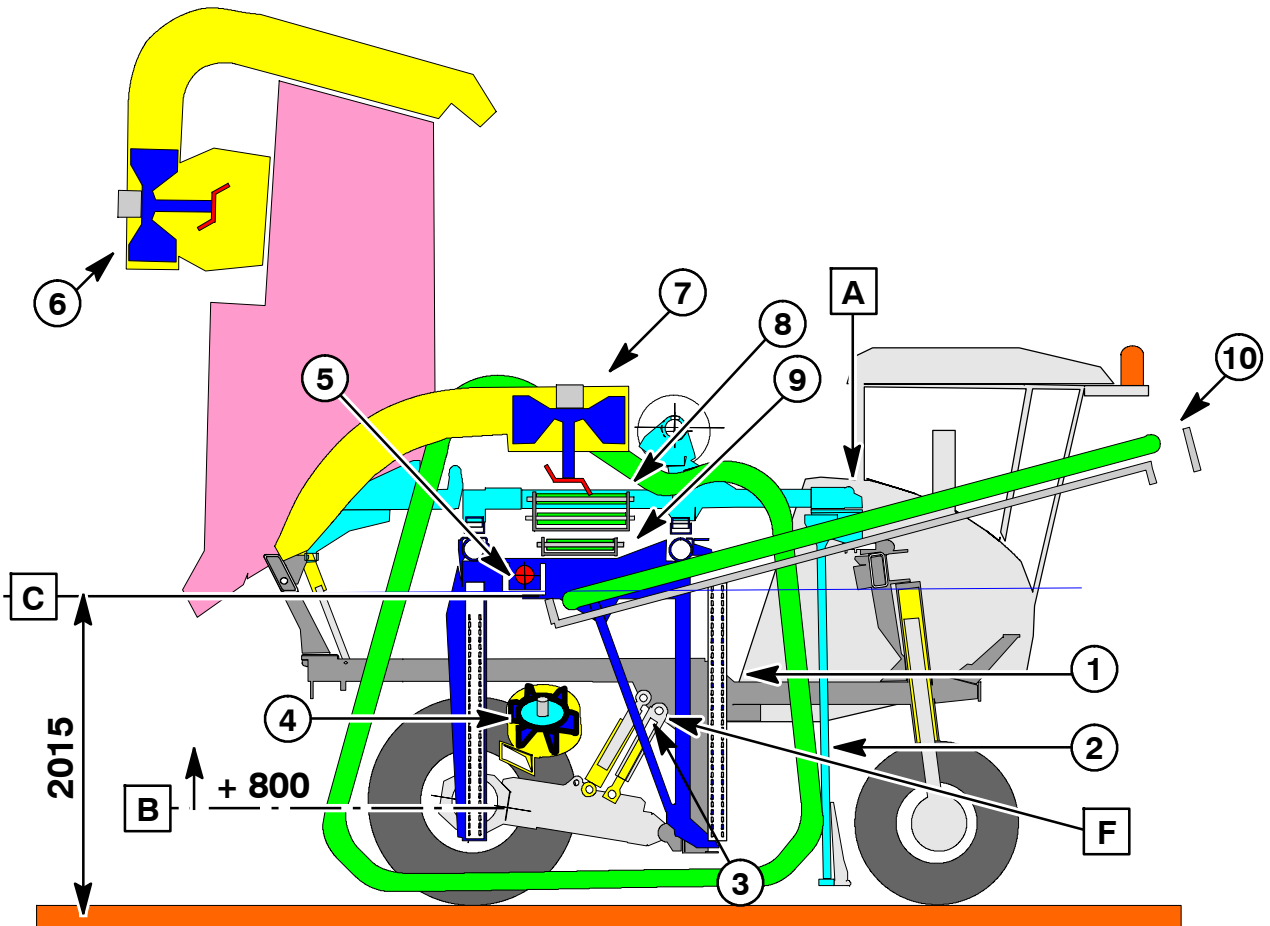




COMMERCIAL DESCRIPTION		VX7090 (1)
Code	DIMENSIONS (mm)	
H1	Height: harvesting equipment on the ground with cab	3635
H2	Harvesting equipment height (2) to the railings	3470
H3	Clearance under rear beam	Min. 2015 Max. 2815
H4	Harvesting equipment clearance under tunnel	Min. 2015 Max. 2815
HB1	Clearance under tilted up hoppers	1660
HB2	Tilting axle height	2080
HB3	Max. height with lifted hopper	5270
HB4	Clearance under the frame 1550-litre hopper	1375
HB5	Height to the roller axis of the emptying link Machine on ground 5200 mm 4200 mm	from 1325 to 5450 from 1325 to 4010
HB6	Link pivot height	1850
LaBp	Link pivot position	1113
LaBr	Position of the roller on the link end perpendicular to the machine axis 5200 mm 4200 mm	from 5100 to 6350 from 4210 to 5350
La1	Max. width 1550-litre hopper and emptying link in road position	3140
La AR	Outer width at the rear wheels (V1 + Gb = La AR)	Tyres 480 / 70 R 28 Tyres 600 / 55 x 30.5 2425 + 495 = 2920 2530 + 600 = 3130
La AV	Outer width at the front wheel level on ground (V2 + Gb = La AV) (V2 at ground level)	Tyres 420/70 R 24 2130 + 430 = 2560
E	Pitch	3180
Lo 1	Overall length	at the cab front 5840
Lo 2		on the link end 4200 6540 on the link end 5200 7540
DAV1	Front offset	at the cab front 1050
DAV2		on the link end 4200 1750 on the link end 5200 2750
DAV3	Tool fixing offset	280
DAR	Rear offset	1610

- (1) VX7090 version with hopper and emptying link

- (2) noria on the ground



**EMPTYING CONVEYOR ON THE RIGHT SIDE AND LEFT HOPPER****Low machine**

- A** Central cross beam of the harvesting equipment with 200-mm rise
- B** Sloping correction 800 mm
- C** Sliding shaking transmission to get a clearance by 2015 mm under the cover, with harvesting equipment in low position
- D** Clearance height under the frame beam, min. 2015 mm max. 2815 mm
- E** Clearance width at the vegetation entrance 700 mm
- F** No limit retainer

**1 Shaking frame**

- shaking plates for removable shakers
- 24 shakers, 22 straight connecting rods 2 elbow connecting rods
- 240-mm extension

**2 Norias**

- 67 large buckets
- pass to stake-guides from 195 to 400 mm

**3 Lifting retainer**

- on one side

**4 Lower extractors**

- dia. 430 mm
- independent stalk choppers, released in washing position

**5 Shaking drive**

- sliding drive in the centre of the longitudinal members (at the bottom)

**6 Left hopper**

- capacity 1550 litres
- extractor dia. 638 mm equipped with removable stalk chopper
- leaf evacuation slide, placed on the side

**7 Emptying conveyor extractors**

- extractor dia. 638 mm equipped with removable stalk chopper
- leaf evacuation slide, placed at the back

**8 Harvesting conveyors**

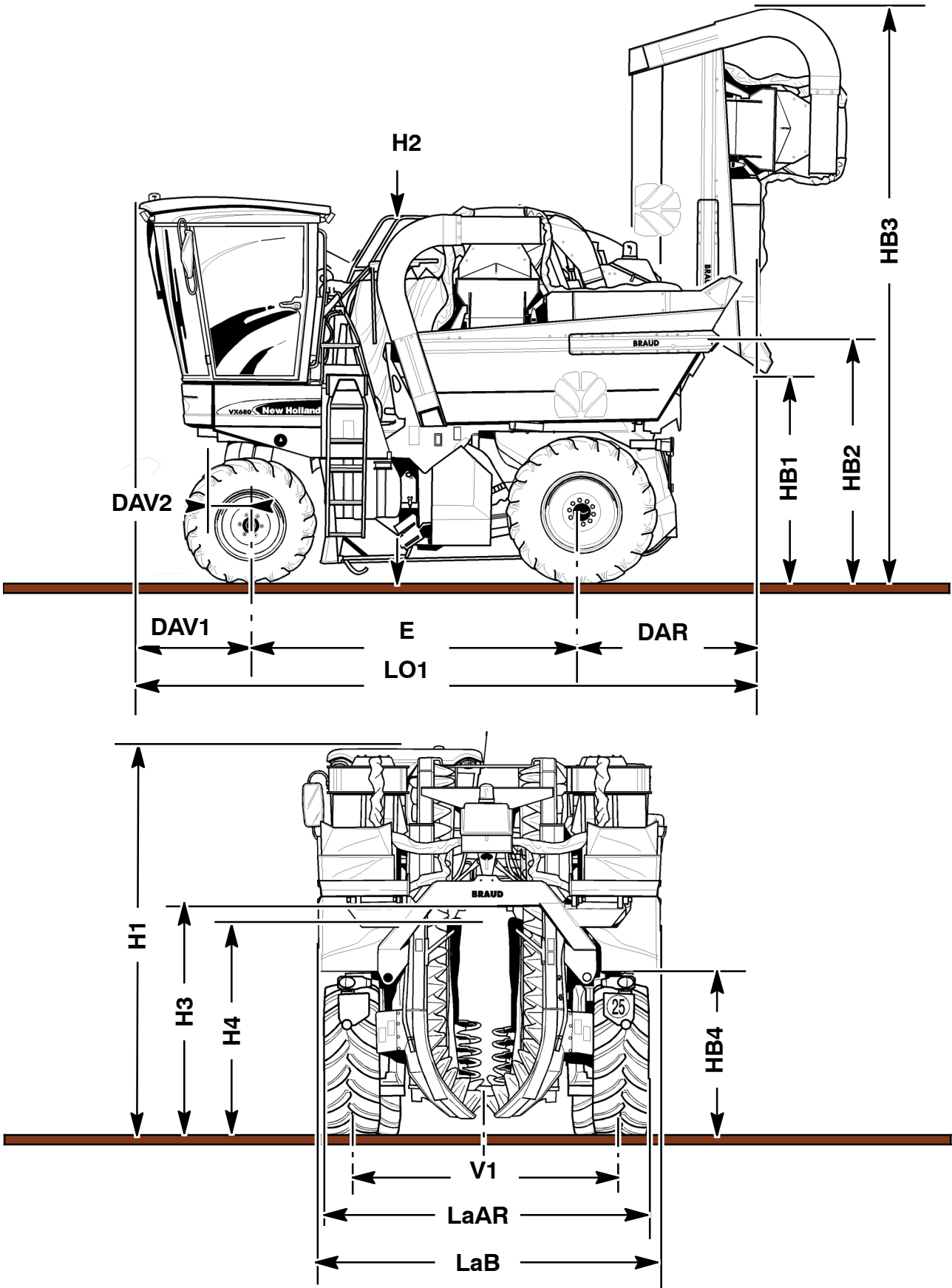
- width 600 mm

**9 Transfer conveyor**

- width 450 mm

**10 Side emptying conveyor**

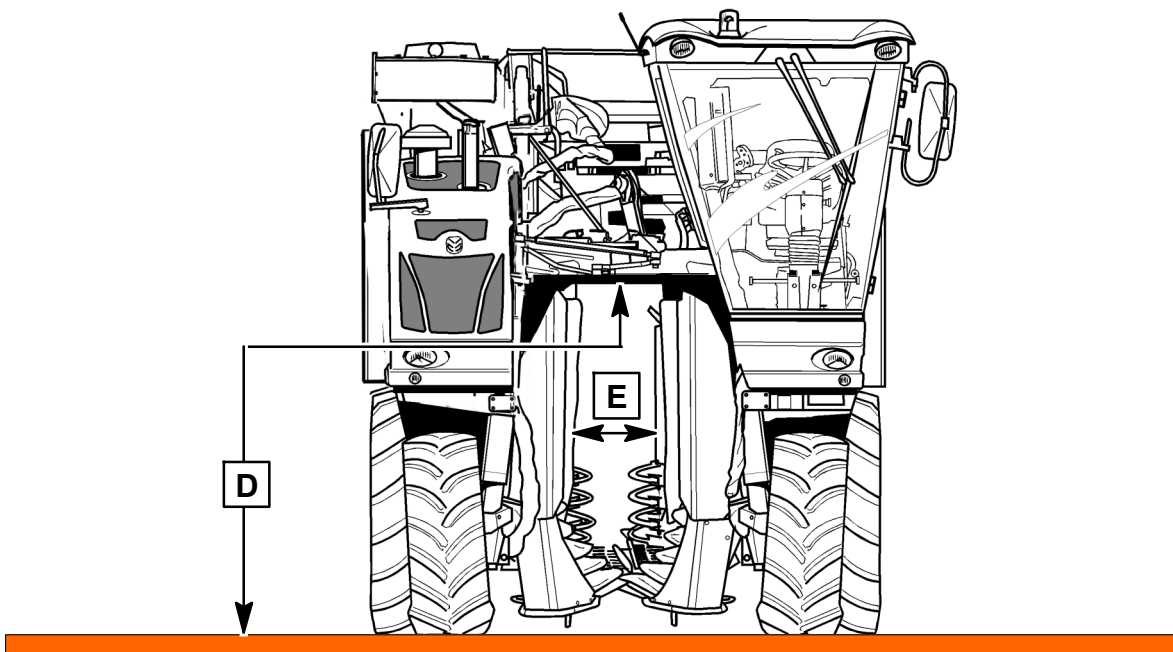
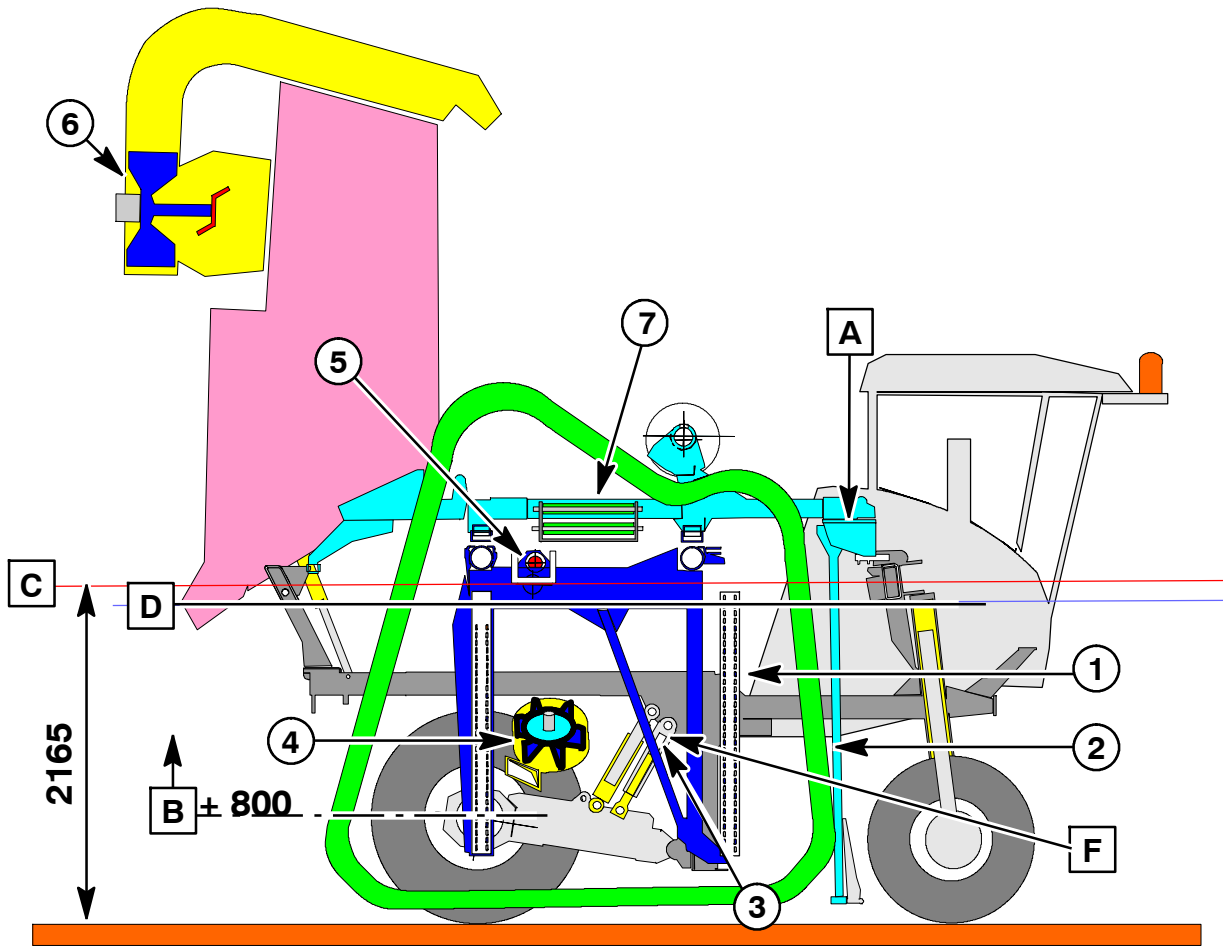
- width 350 mm
- length 4200 or 5200 mm depending on the version (only the end length changes)



COMMERCIAL DESCRIPTION			VX7090 (2)	VX7090 (3)
<b>Self-propelled machine</b>				
Code	DIMENSIONS (mm)			
H1	Height: (lowered harvesting equipment)	with cab	3635	3770
H2	Harvesting equipment height (with noria on the ground)	to the railings	3470	3470
H3	Clearance under the harvesting equipment beam	Min. Max.	2015 2815	2215 2815
H4	Clearance under harvesting equipment tunnel	Min. Max.	2165 2965	2265 2865
HB1	Clearance under tilted up hoppers		1860	2080
HB2	Tilting axle height		2080	2310
HB3	Max. height with lifted hopper		5270	5500
HB4	Clearance under the frame	1550-litre hopper	1375	1600
LaB	Max. width of 2x1550 litres hoppers		3220	
La AR	Outer width at the rear wheels (V1 + Gb = La AR)	Tyres 480 / 70 R 28 Tyres 600 / 55 x 30.5	2425 + 495 = 2920 2530 + 600 = 3130	
La AV	Outer width at the front wheel level on ground (V2 + Gb = La AV) (V2 at ground level)	Tyres 420/70 R 24	2130 + 430 = 2560	
E	Pitch		3180	
Lo 1	Overall length	at the cab front	5840	
DAV1	Front offset	at the cab front	1050	
DAV2	Tool fixing offset		280	
DAR	Rear offset		1610	

- (2) VX7090 low version, with two hoppers,  
axle clearance 2.00 m

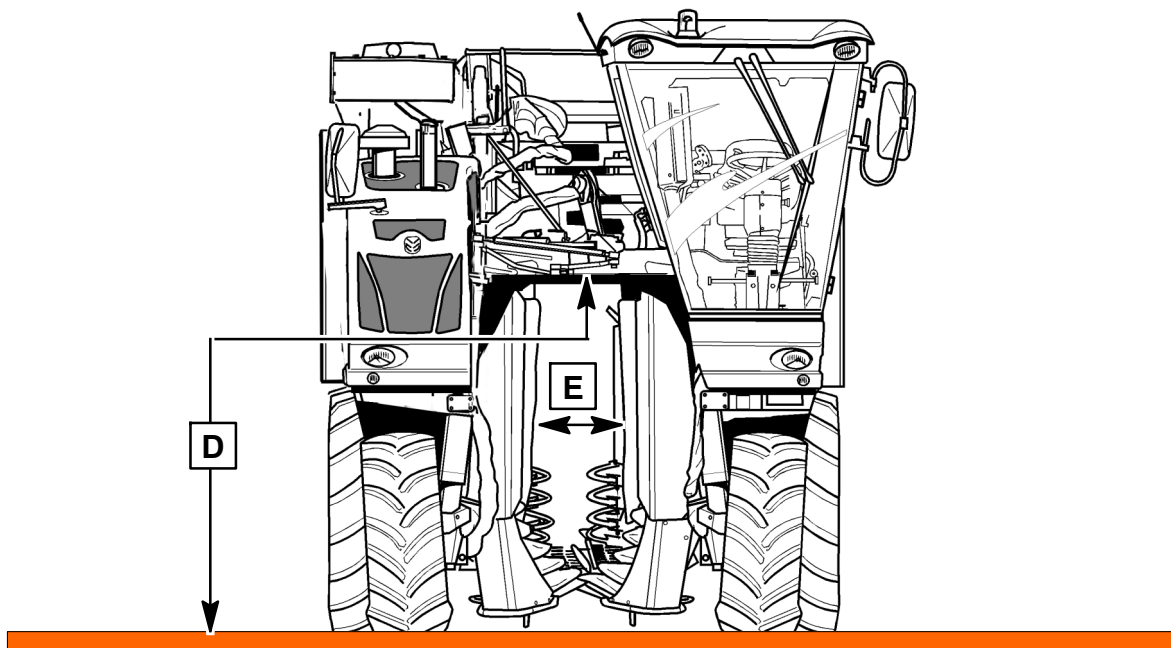
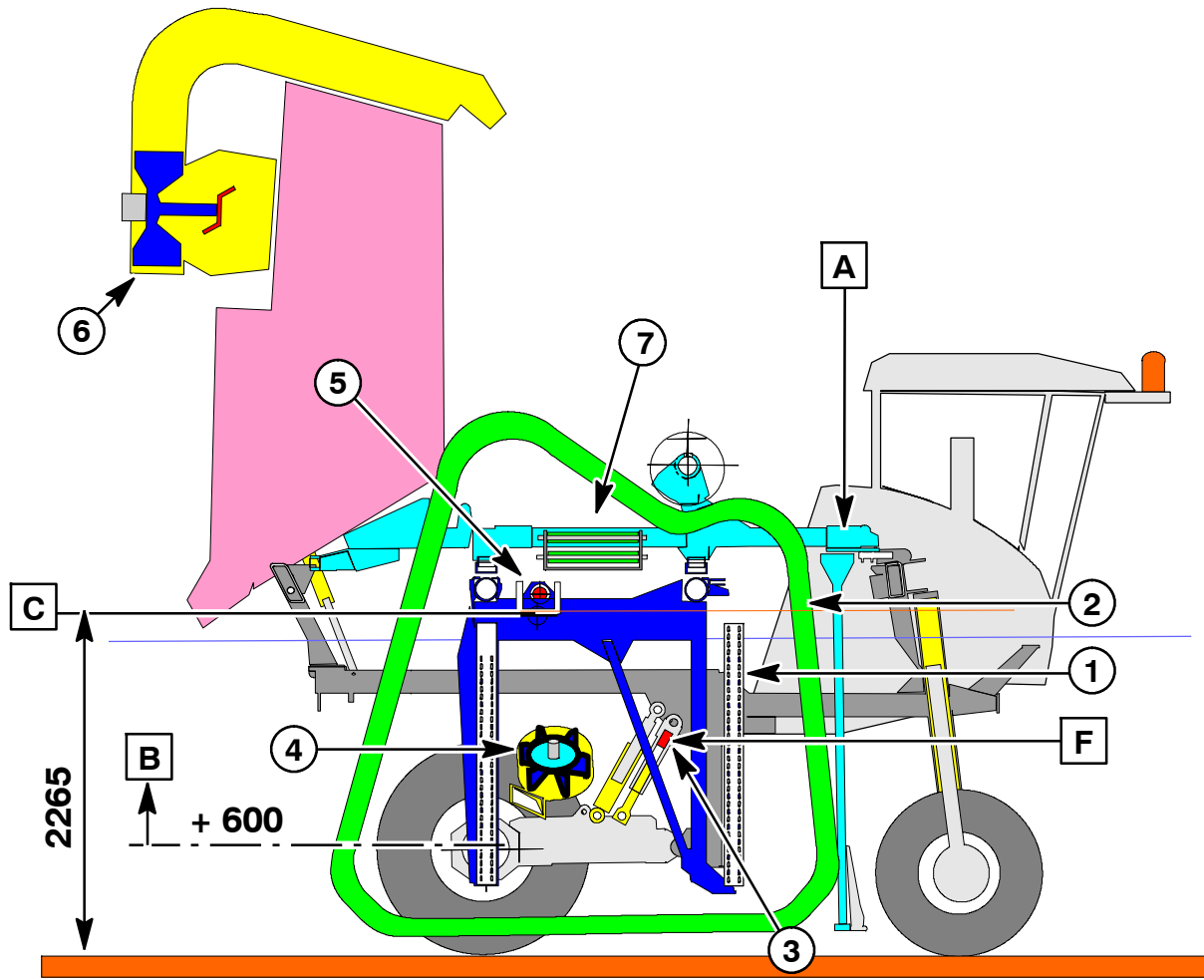
- (3) VX7090 high version, with two hoppers,  
axle clearance 2.20 m



**VX7090 WITH TWO HOPPERS, LOW VERSION  
AXLE CLEARANCE 2.00 m**

- A** Central cross beam of the harvesting equipment with 200-mm rise
- B** Sloping correction 800 mm
- C** Sliding shaking transmission to get a clearance by 2165 mm under the cover, with harvesting equipment in low position
- D** Max. clearance height limited by the frame front beam and by the rear cross-piece at  
min. 2015 mm  
max. 2815 mm
- E** Clearance width at the vegetation entrance 700 mm
- F** No limit retainer
- 1 Shaking frame**
- shaking plates for removable shakers
  - 24 shakers,  
22 straight connecting rods  
2 elbow connecting rods
  - 240-mm extension
- 2 Norias**
- 67 large buckets
  - pass to stake-guides from 195 to 400 mm
- 3 Lifting retainer**
- on one side
- 4 Lower extractors**
- dia. 430 mm
  - independent stalk choppers, released in washing position
- 5 Shaking drive**
- sliding drive placed over the longitudinal members (at the top)
- 6 Right and left hoppers**
- capacity 1550 litres
  - extractor dia. 460 mm equipped with removable stalk chopper
  - leaf evacuation slide, placed on the side
- 7 Harvesting conveyors**
- width 600 mm





**VX7090 WITH TWO HOPPERS, HIGH VERSION  
AXLE CLEARANCE 2.20 m**

**A** No rise to lift the self-propelled machine by 200 mm

**B** Sloping correction 600 mm

**C** Sliding shaking transmission to get a clearance by 2265 mm under the cover, with harvesting equipment in low position

**D** Max. clearance height limited by the frame front beam and by the rear cross-piece at  
min. 2215 mm  
max. 2815 mm

**E** Clearance width  
at the vegetation entrance 700 mm

**F** Retainer, 100 mm, to increase the frame height by 200 mm

### **1 Shaking frame**

- shaking plates,
  - 1) standard (compulsory for olives) 34 openings, useful height 1650 mm,
  - 2) optimized for removable shaking
- 24 shakers,  
22 straight connecting rods  
2 elbow connecting rods
- 240-mm extension

### **2 Norias**

- 67 large buckets
- pass to stake-guides  
from 195 to 400 mm
- clearance (E) in the entry sheets,  
700 mm

### **3 Lifting retainer**

- on two sides

### **4 Lower extractors**

- Diameter 430 mm
- independent stalk choppers, released in washing position

### **5 Shaking drive**

- sliding drive placed over the longitudinal members (at the top)

### **6 Right and left hoppers**

- capacity 1550 litres
- extractor dia. 460 mm equipped with removable stalk chopper
- leaf evacuation slide, placed on the side

### **7 Harvesting conveyors**

- width 600 mm

COMMERCIAL DESCRIPTION		VX7090
<b>WEIGHTS</b>		
PTAC - Total allowed weight under load (kg)		11000
Partition	Front axle (kg)	4800
	Rear axle (kg)	6400
Empty weight with harvesting equipment and without (with) destemmers	Total	from 10040 to 10600
Weight of one wheel (kg)	420/70 R 24	
	480/70 R 28	
	600/55 x 30.5	
Thermal engine weight (kg)		
<b>FEEDING / EXHAUST</b>		
Fuel tank	Used fuel	Diesel fuel
	Capacity (litres)	250
Engine feeding system		Direct injection
Air filter	Make	DONALDSON
	Type	ELB 12-0265
Engine cooling	Water capacity (litres)	20
	Fan	sucking (2 speeds or 1 speed, depending on the series)
Cooling fan $\varnothing$ (mm)		610
<b>DRIVE</b>		
Pump for engine fan	Make	SAUER
	Displacement (cm <sup>3</sup> /rev.)	17
	Empty operating speed (rpm)	2325 (93% of engine speed)
	Capacity (l/minute), output 0.9	35
Fan motor	Make	SAUER
	Displacement (cm <sup>3</sup> /rev.)	12,2
Variable displacement inching hydraulic pump	Make	REXROTH
	Type	A4VG
	Total displacement (cm <sup>3</sup> /rev.)	from 0 to 105

COMMERCIAL DESCRIPTION		VX7090
<b>DRIVE (follows)</b>		
Priming pump	Displacement (cm <sup>3</sup> /rev.)	25
	Capacity (l/minute), output 0.9 Speed 2500 rpm	56.25
Front wheel motor	Make	POCLAIN
	Type	MS 08
	Displacement (cm <sup>3</sup> /rev.)	1043
Rear wheel motor	Make	POCLAIN
	Type	MSE 18
	Displacement (cm <sup>3</sup> /rev.)	2636 (1406/1230)
Max. speed (km/h) in road position		25 km/h
Max. speed in field position		12
Hydraulic oil		
Capacity (litres)	Total	65
	Reservoir	
Oil type		NEW HOLLAND: Hydrosystem 68 or Hydrosystem 68 BIO S
Conveyor and extractor pump	Make	REXROTH
	Displacement (cm <sup>3</sup> /rev.)	"Load sensing" from 0 to 45
	Idle operating rpm speed	2500 (see engine speed)
	Capacity (l/minute), output 0.9	101.2
Shaking pump	Make	SAUER
	Displacement (cm <sup>3</sup> /rev.)	22 or 25
	Idle operating rpm speed	2500 (see engine speed)
	Capacity (l/minute), output 0.9	50 or 56
Pump for steering/lifting/hoppers	Make	SAUER
	Displacement (cm <sup>3</sup> /rev.)	14
	Idle operating rpm speed	2325 (93% of engine speed)
	Capacity (l/minute), output 0.9	29
<b>STEERING</b>		<b>Hydrostatic</b>
Type		EATON QAMP 146 cm <sup>3</sup> /rev.
<b>BRAKING SYSTEM</b>		
Service brake		Supplied by the hydrostatic transmission
Service brake (on one rear wheel)		Operated by one pedal and by the steering
Park brake		Operated by left manual lever

COMMERCIAL DESCRIPTION		VX7090
TILTING CORRECTION		30%
<b>PLATFORM CAB</b>		
Heated and A/C cab		
Activated charcoal filter		Optional
Board computer		•
Pneumatic seat		•
Multifunction lever		•
<b>LIGHTING AND WARNING LIGHTS</b>		
High/low beams		2
Front parking lights		2
Rear parking lights		2
Direction indicator	Front	2
lights	Rear	2
	Side	2
Stop lights		2
License plate light		1
Reflector	Rear	2
Revolving beacon	with cab	2
Supply voltage / battery		12 V / 180 Ah
Alternator		120 A

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