21D
221D
Wheel Loaders

Operator's Manual

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6-34101NA

CASE

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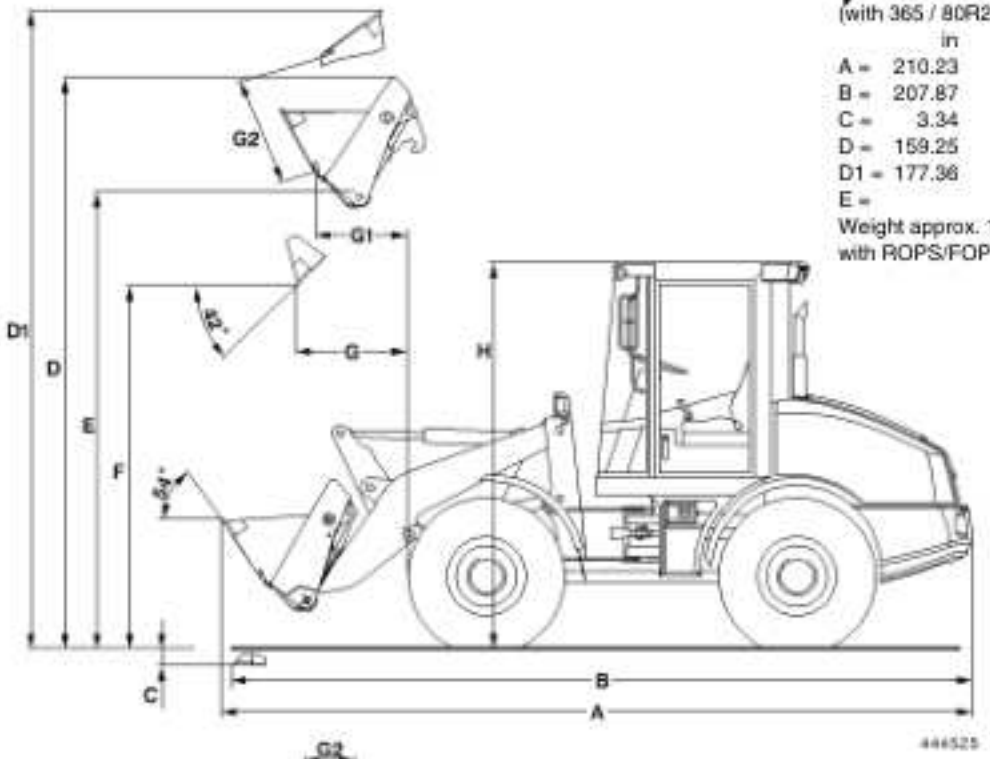
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Dimensions 221D

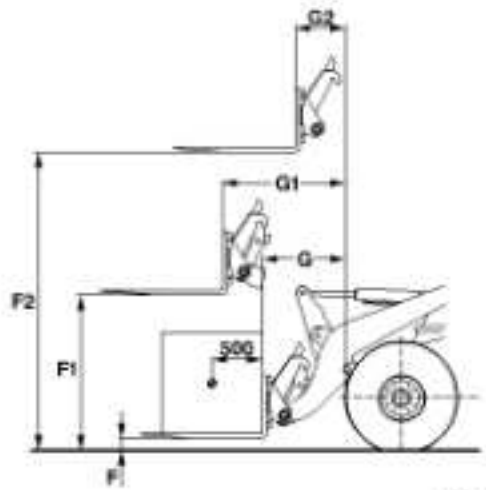
Bottom Dump Bucket
1.11 yd³ bucket 80.70 in wide,
γ = 1.35 ton/yd³
(with 365 / 80R20 tires)

	in		in
A =	210.23	F =	
B =	207.87	G =	30.51
C =	3.34	G1 =	21.65
D =	159.25	G2 =	32.28
D1 =	177.36	H =	108.85
E =			

Weight approx. 11660 lbs
with ROPS/FOPS cab



444525



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Lifting forks with Quick-Coupler

Dimensions:		with tires 365/80R20 in
Lift height	F	3.93
	F1	52.75
	F2	115.35
	G	31.88
	G1	47.83
	G2	19.09
Width of fork carriage		57.08
Tine width		3.93

Payload with lifting forks and load at 500 mm CoG		
	Configuration	Configuration
Fork carriage	FEM II, 20.27 in wide	FEM II, 20.27 in wide
Fork tine	3.93 x 1.77 x 47.24 in 2B	3.93 x 1.77 x 47.24 in 2B
Quick-coupler	standard	standard
Tyres	365/80 R20	365/80 R20
Additional counterweight	—	440 lb
Total weight	11220 lb	11660 lb
Tip load (articulated)	**4950 lb**	**6050 lb**
Safety factor	**Payload**	**Payload**
1.25	**3960 lb** *	**4840 lb**
1.67	**2970 lb**	**3630 lb**

* not applicable to full lifting height. Max payload over full lifting height: 4840 lb.
Stability factor **1.25** for tip load with loader on level ground.
Stability factor **1.67** for tip load with loader on uneven ground.
Tip loads calculated **acc. to DIN 24094.**

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Control lever - Traveling / Working

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The wheeled loader is equipped with a control lever (25, Fig. 1) with which the traveling and working modes are controlled.

The control operations for the working equipment are described under "Working".

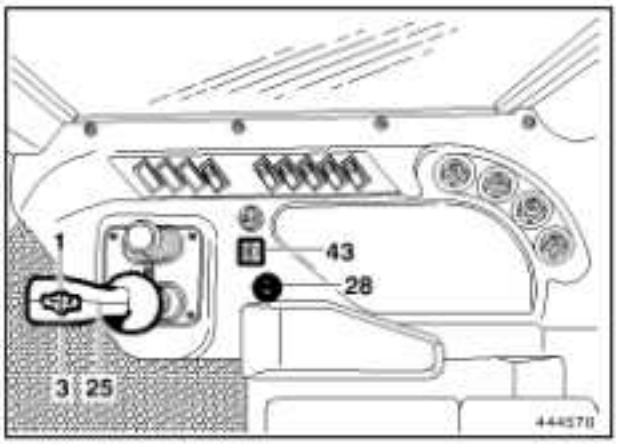


Fig. 1

The switch (1, Fig. 1) serves to select the direction of travel - forward or reverse - and is used as follows:

- Switch (1) in center position (position "0") - travel direction selector OFF.
  Pilot lamps (13 and 14, Fig. 2) are off.
- Switch (1) forward - forward travel ON.
  Pilot lamp (14, Fig. 2) lights up (green).
- Switch (1) back - reverse travel ON.
  Pilot lamp (13, Fig. 2) lights up (yellow).

When the parking brake is applied, forward or reverse travel can only be preselected.
The forward (14) or reverse (13) direction of travel is indicated only when the parking brake is released.
The gears are changed only when the parking brake is released.

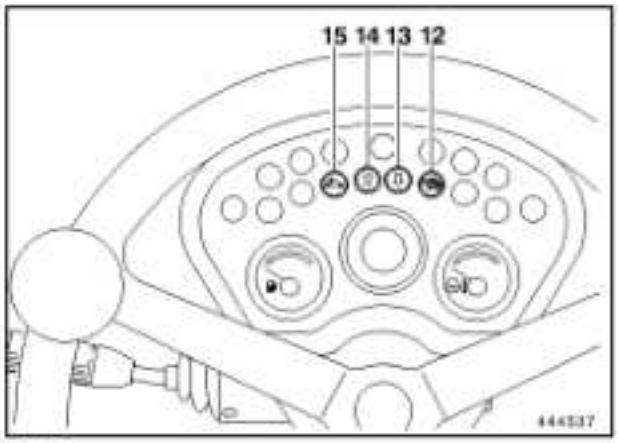


Fig. 2

The pushbutton (3, Fig. 1) serves to switch over from creep to working speed and vice versa.
The respective pushbutton position is indicated by lamps (12 and 15, Fig. 2).

12 = creep speed
15 = working speed

When creep speed is selected, the loader speed is limited to the maximum admissible speed for this range. This is important for working operations requiring low speeds.

Selection of the working range automatically - as required - covers the creep range too. □

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Plan B - after every 500 HOURS
(at 500, 1500, 2500 ... HOURS)

Plan C - after every 1000 HOURS
(at 1000, 2000, 4000 ... HOURS)

Plan D - after every 3000 HOURS
(at 3000, 6000, 9000 ... HOURS)

Component designation	Servicing activity	Oil / Grease	Quantity / Number	Plan B	Plan C	Plan D
Axle						
Planetary gearbox	Check oil level in acc. with oil-checking chart		2 x 2	●	●	●
Front axle	Change oil in acc. with oil-checking chart [1]		1		●	●
Rear axle	Change oil in acc. with oil-checking chart [1]		1		●	●
Transfer gearbox	Change oil in acc. with oil-checking chart [1]		1		●	●
Planetary gearbox	Change oil in acc. with oil-checking chart [1]		2 x 2		●	●
Cardan shaft	Grease in acc. with lubricating chart			●	●	●
Heating	Check for leaks			●	●	●
Filter	Clean / replace		1	●	●	●
Driver's cab						
Fastening screws	Check tightness			●	●	●
Breather filter	Replace		1	●	●	●
Hinges	Grease in acc. with lubricating chart		2	●	●	●

[1] Oil change after 1 year at the latest □

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