

# 969

ZF transmission and ZF axles

# RANGER



## FEATURES

- Cat 3306B
- ZF transmission
- ZF axles and internal wet braking system
- A/C ROPS cabin with pillarless wrap around windscreen for maximum visibility
- Single lever hydraulic pilot control
- 2 years or 2000 hours warranty

## OPTIONS

- Optional auto weighing equipment
- Optional auto greasing system
- Standard attachments available

## SPECIFICATIONS

Item	Performance
Engine horse power	174.5 kW / 235 HP
Max. traction force (by engine)	≥165 kN
Operating weight	18,400kg/18.4t
Standard bucket capacity	3.5 m <sup>3</sup>
Rated load	6000 kg / 6 t
Max. brakeout force	≥198 kN / 20,190 kg / 20.19t
Static tipping load	≥115 kN / 11,730 kg / 11.73t
Min. turning radius outside rear wheel	6726 mm
Min. turning radius outside bucket	7332 mm

## ENGINE

Item	Performance
Model	3306B (C6121ZG20)
Type	Straight-lined, water cooled, direct injection
Rated power	170 kW
Rated rpm	2200 rpm
Displacement	9.726 L
Cylinder No.	6
Cylinder bore/stroke	126/130 mm
Min. fuel consumption	≤217 g/kW.h
Max. torque	843 N.m

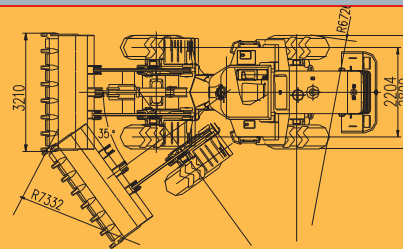
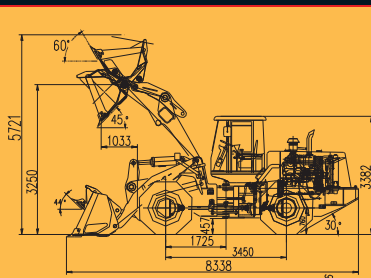
## WORKING SYSTEM

Item	Performance
Type	Single lever hydraulic pilot control
Boom cylinder- cylinder bore×piston rod diameter×stroke	180×100×798 mm
Bucket cylinder- cylinder bore×piston rod diameter×stroke	210×140×546 mm
Pump	CBGj2080/1010-XF
Multiple directional control valve	D32
Working pressure	2611 Psi
Lifting time(max. load)×	≤6.7s
Lowering time(empty)×	≤3.5s
Dumping time (empty)	≤1.6s
Total	≤11.8

## STEERING SYSTEM

Item	Performance
Type	Full-hydraulic articulated steering
Steering cylinder-cylinder bore×piston rod diameter×stroke	100×50×435 mm
Pilot-actuated valve	YXL-F250F
Steering pump	CBGj2080/1010-XF
Redirector	BZZ-100
Steering angle	35°
Working pressure	2031 Psi

## DIMENSIONS OF 969



## TRANSMISSION

Item	Performance				
Torque converter	Type ZF	Circulated, water cooled			
	Torque ratio	2:55			
	Cooling system	Circulated, water cooled			
	Inlet oil pressure	123.25 Psi			
	Outlet oil pressure	72.5 Psi			
Travel speed	Speeds	I	II	III	IV
	Forward(km/h)	0-6.5	0-11.5	0-23	0-36
	Reverse(km/h)	0-6.5	0-11.5	0-23	--
Transmission	Type	Dead axle electrohydraulic shift			
	Shift	Forward 4 Reverse 3			
	Transmission ratio	Forward I	4:278		
		Forward II	2:368		
		Forward III	1:126		
		Forward IV	0:648		
		Reverse I	4:278		
		Reverse II	2:368		
	Reverse III	1:126			
	Working pressure	203.1-232.1 Psi			
Main drive	Type	Single stage, spur gear			
	Gear ratio	3:7			
Final drive	Type	Single stage, planetary shift			
	Gear ratio	6:35			
Driving axle and tyre	Type	Driving axle and tyre 4x4			
	Tyre specification		23.5-25		
	Tyre pressure	Front wheel	48.3-51.2 Psi		
		Rear wheel	38.89-42.64 Psi		
Brake system	Service brake	Internal wet brakes			
	Service brake	870.2 Psi			
	Parking brake	Internal expansion type brake			

## SERVICE REFILL CAPACITIES

Item	Performance	Item	Performance
Fuel	300L	Engine	20L
Hydraulic oil	190L	Gear box	35L
Axles (main drive and final drive)	2x12.5L	Brake system	4L

## DIMENSIONS

Item	Performance	Item	Performance
Length (With bucket on ground)	8338 mm	O/s to o/s width of wheels	2800 mm
Height	3382 mm	Wheel centre to wheel centre	2204 mm
Max. dumping height (-45° dump angle)	4293 mm	Front wheel to bucket edge	1033 mm
Bucket width	3210 mm	Wheelbase (front/back)	2899 mm