

**1166, 1169H, 1174, 1177,
1177 Hydro/4,
1188, 1188 Hydro/4
Combines**



**John Deere Werke Zweibrücken
TM-4452**

Printed in Germany (English)

**SUMMARY OF MOST IMPORTANT SPECIFICATIONS
1166, 1169H, 1174, 1177, 1177 HYDRO/4, 1188, 1188 HYDRO/4**

SPECIFICATIONS

6466 Engine

Valve clearance, intake valve	0.45 mm (0.018 in.)
Valve clearance, exhaust valve	0.70 mm (0.028 in.)
Compression	2450 to 2850 kPa (24.5 to 28.5 bar; 355 to 415 psi)
Max. difference in compression pressure between cylinders	350 kPa (3.5 bar; 50 psi)
Opening pressure of a new injection nozzle	27900 kPa (279 bar; 4050 psi)
Minimum opening pressure of a used nozzle	26200 kPa (262 bar; 3800 psi)
Maximum difference in opening pressure	350 kPa (3.5 bar; 50 psi)
Fast idle	2400 ± 50 rpm
Slow idle	1200 ± 50 rpm

6359 Engine

Valve clearance, intake valve	0.35 mm (0.014 in.)
Valve clearance, exhaust valve	0.45 mm (0.018 in.)
Compression	2100 kPa (21 bar; 300 psi)
Max. difference in compression pressure between cylinders	350 kPa (3.5 bar; 50 psi)
Opening pressure of a new injection nozzle	25100 to 25800 kPa (251 to 258 bar; 3650 to 3750 psi)
Minimum opening pressure of a used nozzle	24100 kPa (241 bar; 3500 psi)
Maximum difference in opening pressure	700 kPa (7 bar; 100 psi)
Fast idle	2675 ± 50 rpm
Slow idle	1200 ± 50 rpm

Air Intake System

Air cleaner restriction indicator light will glow at a vacuum of	500 mm (20 in.) waterhead
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SUMMARY OF MOST IMPORTANT SPECIFICATIONS 1166, 1169H, 1174, 1177, 1177 HYDRO/4, 1188, 1188 HYDRO/4

SPECIFICATIONS (Continued)

Cooling System

Thermostat opening temperature	71 to 82°C (160 to 180°F)
Radiator cap valve opening pressure	100 to 120 kPa (1.0 to 1.2 bar; 14 to 17 psi)

Electrical System

Battery voltage	12 volts
Alternator output current (at 14 volts)	65 amps

Hydraulic System

Hydraulic pump delivery (except 1169H)	
– main circuit	40 liters/min (10.5 gpm)
– steering circuit	12 liters/min (3.2 gpm)
Hydraulic pump delivery (1169H)	
– main circuit	29 liters/min (7.6 gpm)
– secondary circuit	10.5 liters/min (2.8 gpm)
– leveling system	21 liters/min (5.5 gpm)
Pressure relief valve setting	
– in mechanical control valve	13800 to 14500 kPa (138 to 145 bar; 2000 to 2100 psi)
– in electro-magnetic control valve	17200 to 18000 kPa (172 to 180 bar; 2500 to 2610 psi)
– in leveling system	16600 to 17400 kPa (166 to 174 bar; 2400 to 2520 psi)

Steering System

Pressure relief valve setting	13500 kPa (135 bar; 1960 psi)
Shock valve setting	18000 to 19500 kPa (180 to 195 bar; 2610 to 2830 psi)

Clutch

Minimum thickness of clutch disk	7 mm (0.28 in.)
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Wheels

Wheel bolt torques	
– Front wheels (except 1169H)	420 Nm (304 ft-lb)
– Front wheels (1169H)	550 Nm (400 ft-lb)
– Rear wheels	180 Nm (130 ft-lb)

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SUMMARY OF MOST IMPORTANT SPECIFICATIONS

1166, 1169H, 1174, 1177, 1177 HYDRO/4, 1188, 1188 HYDRO/4

CAPACITIES

Engine lubrication system	
– 1177 Hydro/4, 1188, 1188 Hydro/4	20 liters (5.3 U.S.gal.)
– 1177	17 liters (4.5 U.S.gal.)
– 1166, 1174, 1169H	13 liters (3.4 U.S.gal.)
Hydrostatic ground speed drive	24 liters (6.3 U.S.gal.)
Transmission with differential	6.6 liters (1.75 U.S.gal.)
Final drive (each)	2.2 liters (0.6 U.S.gal.)
Complete hydraulic system	25 liters (6.6 U.S.gal.)
Clutch and brake operating assembly	1.5 liters (0.4 U.S.gal.)
Chain transmission (cutting platform drive)	0.5 liters (0.13 U.S.gal.)
Hydrostatic reel drive	12 liters (3.17 U.S.gal.)
Cylinder drive reduction gear	1.9 liters (0.5 U.S.gal.)
Engine cooling system	
– 1177 Hydro/4, 1188, 1188 Hydro/4	34 liters (9.0 U.S.gal.)
– 1166, 1169H, 1174, 1177	30 liters (8.0 U.S.gal.)
Refrigerant capacity (air conditioning)	1950 g (68.8 oz.)
Compressor oil charge	320 cm ³ (19.5 cu.in.)
Fuel tank capacity	300 liters (80 U.S.gal.)

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**Combines 1166, 1169H, 1174, 1177,
1177 Hydro/4, 1188, 1188 Hydro/4
TECHNICAL MANUAL
TM4452 (Apr-90)**

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