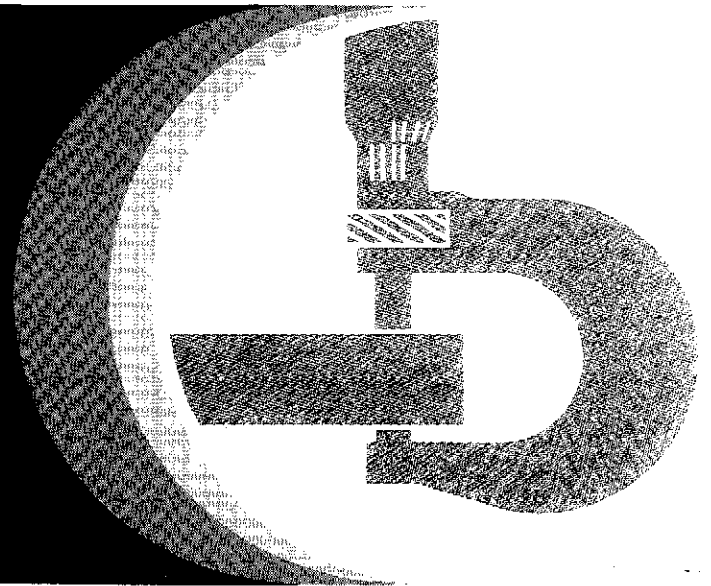


3640 Tractor



John Deere Werke Mannheim
John Deere Ibérica S.A. Getafe
TM-4419

Printed in Germany (English)



3640 TRACTOR TECHNICAL MANUAL TM-4419

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SPECIFICATIONS

SERIAL NUMBER PLATES

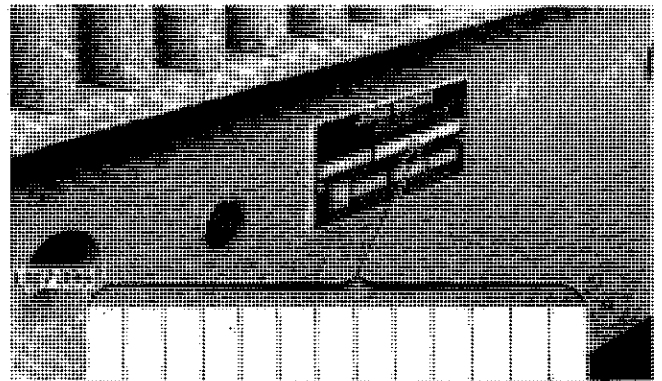
The following illustrations show the serial number plates for tractor major components. The letters and figures on these plates are required for warranty claims and when ordering replacement parts.

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PRODUCT IDENTIFICATION NUMBER

The product identification number plate is located on right-hand side of front axle carrier. The chassis number is stamped in front axle carrier next to the number plate.

NOTE: When ordering tractor parts (excluding engine parts), quote all letters and figures of serial number stamped on this plate.

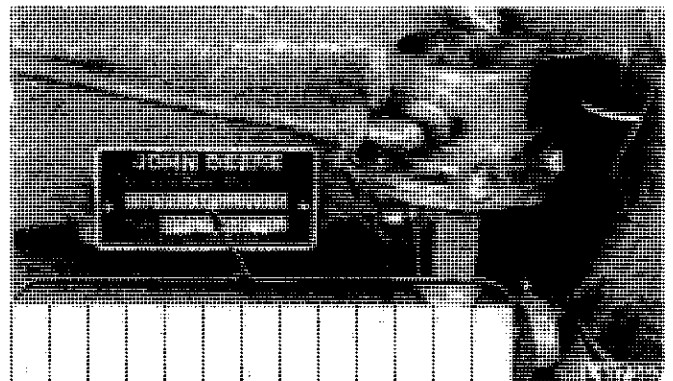


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ENGINE SERIAL NUMBER

The engine serial number plate is located on right-hand side of engine block.

NOTE: When ordering engine parts, quote all figures on this plate.

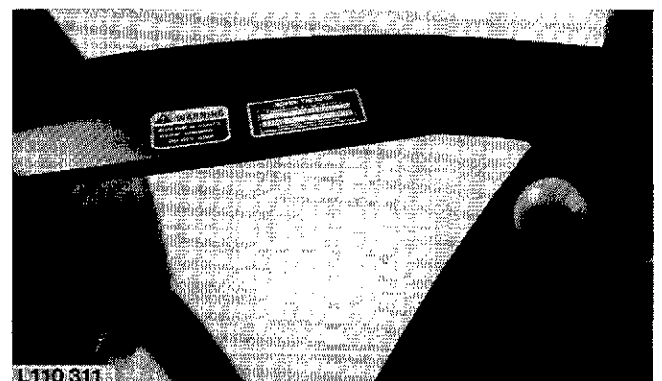


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TRANSMISSION SERIAL NUMBER

The transmission serial number plate is located on right-hand crossmember of cab and on right-side of transmission case.

NOTE: In addition to serial number of transmission and transmission type, this serial number plate also specifies differential and front wheel drive gear ratios.

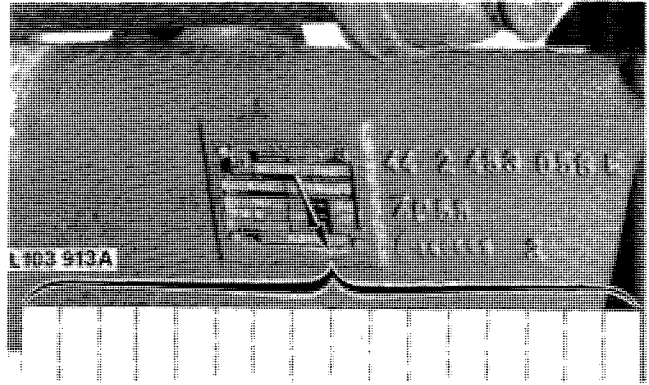


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Specifications

FRONT WHEEL DRIVE AXLE SERIAL NUMBER

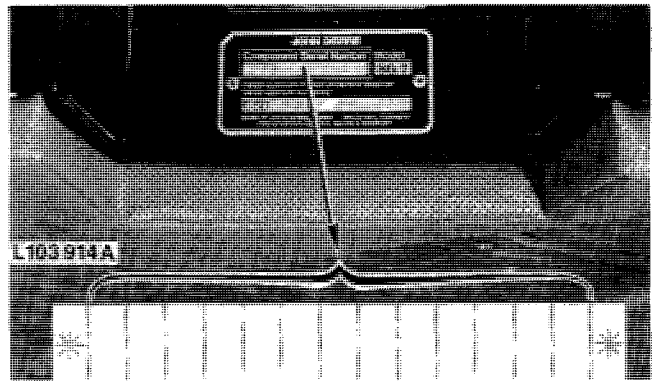
The front wheel drive axle serial number plate is located on rear of right-hand axle half.



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OPERATORS CAB SERIAL NUMBER

With operator's cab door open, cab serial number plate is visible in roof recess as you enter the cab.



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MODEL SERIAL NUMBERS

Fuel injection pump, fuel injection nozzles, alternator, starting motor, hydrostatic steering valve, air conditioning system compressor (when equipped) and hydraulic pump have serial numbers to facilitate identification of different makes of a given unit.

TECHDA-LA71005BE-180385

Specifications

ENGINE

Number of cylinders	6
Cylinder liner bore	106.5 mm (4.19 in.)
Stroke	110 mm (4.33 in.)
Displacement	5883 cm ³ (359 cu.in.)
Compression ratio	17.4 : 1
Max. torque at 1400 rpm	390 Nm (285 ft-lb)
Firing order	1-5-3-6-2-4
Valve clearance (engine hot or cold)	
– Intake valve	0.35 mm (0.014 in.)
– Exhaust valve	0.45 mm (0.018 in.)
Slow idle speed	700 to 800 rpm
Fast idle speed	2510 to 2610 rpm
Rated engine speed	2400 rpm
Working speed range	1400 to 2400 rpm
Engine speed for PTO operation	2175 rpm
Flywheel horsepower at engine rated speed of 2400 rpm	
– According to DIN 70 020	82 kW (112 hp)
PTO* horsepower at engine rated speed of 2400 rpm	
– According to DIN 70020; 50 MOE	74 kW (100 hp)
– According to SAE J 816 b; 80 MOE	71 kW (95 hp)
PTO* horsepower at engine speed of 2175 rpm	
– According to DIN 70020	72 kW (98 hp)
Lubrication system	Full internal force feed system with full flow filter

* With the engine run in (above 100 hours of operation) and at operating temperature (engine and transmission), measured by means of a dynamometer
Permissible variation \pm 5%

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Specifications

ENGINE CLUTCH

- Type Single dry disk clutch with torsion damper, foot-operated

COOLING SYSTEM

- Type Pressurized system with centrifugal pump
- Temperature regulation Two thermostats

FUEL SYSTEM

- Type Direct injection
- Fuel injection pump timing to engine TDC
- Fuel injection pump type Distributor type with two pistons Stanadyne no. DB2 4378
- Air cleaner Dry-type air cleaner with secondary (safety) element

ELECTRICAL SYSTEM

- Batteries 2 x 12 volt, 88 Ah
- Alternator with internal regulator 14 volt, 55 amps.
- Starting motor 12 volt, 3 kW (4 hp)
- Battery terminal grounded negative

SYNCHRONIZED TRANSMISSION

- Type Synchronized transmission
- Gear selections 8 forward and 4 reverse
- Gear shifting Two forward groups and one reverse group; Synchronized forward and reverse shifting within groups

HI-LO SHIFT UNIT

- Type Hydraulic gear reduction unit which can be shifted under load with "wet" multiple disk clutch and brake packs.
- Travel speed decreases in each gear by approx. 20 %
- Shifting to reduced (Lo) speed hydraulic
- Shifting to normal (Hi) speed preloaded cup springs

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DIFFERENTIAL AND FINAL DRIVES

- Type of differential spiral bevel gears
- Type of final drive planetary reduction drive

DIFFERENTIAL LOCK

- Operation hand or foot operated
- Disengaged automatically as soon as traction has equalized

PTO

- Type independent of transmission, can be engaged and disengaged under load
- PTO speeds at engine speed of 2175 rpm 540/1000 rpm, shiftable
- PTO clutch hydraulically operated "wet" disk clutch
- PTO brake hydraulically operated "wet" disk brake

FRONT PTO

- Type independent of transmission, can be engaged and disengaged under load
- Control electrical/hydraulic solenoid switch
- PTO speed at an engine speed of 2175 rpm 1000 rpm
- PTO clutch hydraulically operated "wet" disk clutch
- PTO brake hydraulically operated "wet" disk brake

PTO SPEEDS

at engine speed	540 rpm shaft	1000 rpm shaft
- 800 rpm	198 rpm	368 rpm
- 2175 rpm	540 rpm	1000 rpm
- 2400 rpm	595 rpm	1104 rpm
- 2500 rpm	620 rpm	1149 rpm
- 2610 rpm	648 rpm	1200 rpm

Specifications

FRONT WHEEL DRIVE

- Type engaged hydraulically under load with "wet" disk clutch
- Control electrical/hydraulic solenoid switch
- Drive engagement preloaded cup springs
- Drive disengagement hydraulic

HYDROSTATIC STEERING

- Type without mechanical linkage between steering valve and front wheels

FOOT BRAKES

- Rear brake self-adjusting, hydraulically operated "wet" disk brakes
- Propeller shaft brake self-adjusting, hydraulically operated disk brake

HANDBRAKE

- Type mechanically operated band-type locking brake acting on the differential

HYDRAULIC SYSTEM

- Type closed, constant pressure system
- System pressure when pump pistons idle 19000 kPa (190 bar; 2760 psi)
- Operating pressure 17000 kPa (170 bar; 2470 psi)
- Hydraulic pump 8-piston pump with variable displacement

ROCKSHAFT

- Type with quick coupling (hook-type) draft links
- Regulation load control, load-and-depth control, float position
- Control via draft links

- FRONT HITCH controlled by selective control valve

- GROUND TRAVEL SPEEDS see Operator's Manual

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