

ORCHARD TRACTORS

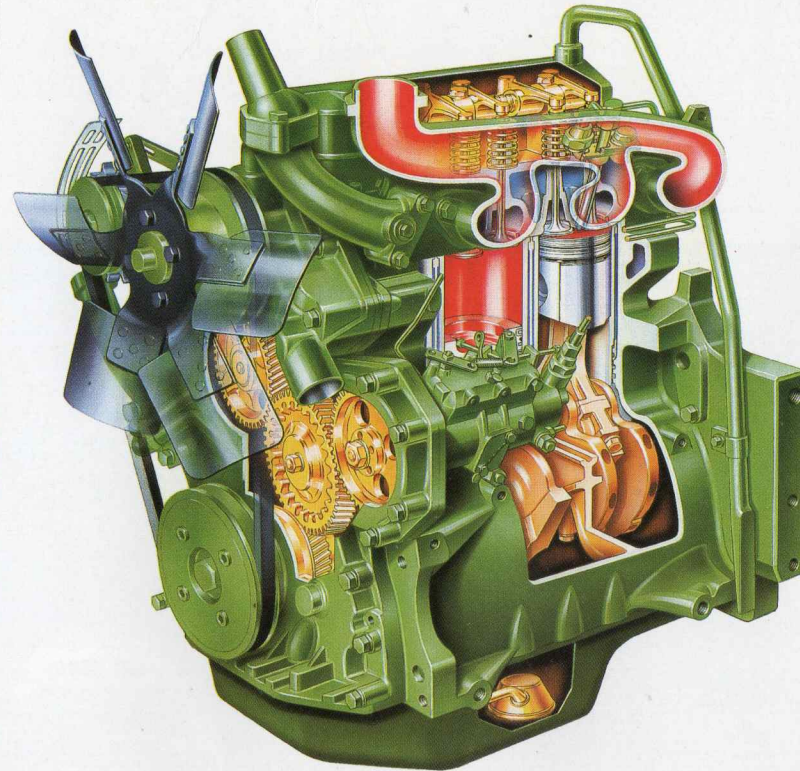


IMPORTANT:-

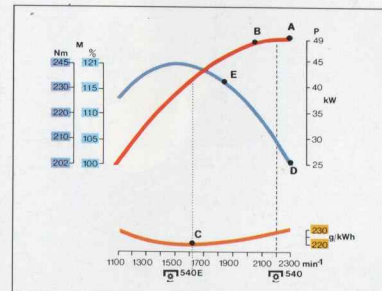
This information is sourced from overseas and does not necessarily apply locally. Your nearest John Deere dealer will be happy to point out where local information varies from that given in this brochure.

True orchard tractors that deliver compact power

New John Deere 42 to 67 DIN PS orchard tractors are true orchard tractors. They're not simple "adaptations" of standard-line models. They're compact, for excellent manoeuvrability. And they're very powerful. You can operate giant atomisers or handle cultivation operations with complete confidence. Our tractors are extra-low to work under drooping tree limbs. Both types are light weight to reduce soil compaction and avoid root damage even in wet conditions. Their smooth, curved styling won't catch branches. The removable cab option provides year-round comfort. John Deere: True Orchard Tractors.



A mobile power plant: At 2300 rpm, it's excellent in fuel efficiency. John Deere 3-cylinder, 2.9-litre engines operate at a low engine speed. Less fuel is consumed. And there's less engine wear. A slow piston speed of 8.4 m/sec. reduces engine fatigue. Plus, it produces fewer vibrations, so it's comfortably quiet.



High torque rise means power when you need it

John Deere constant power engines produce tremendous lugging ability. Plus they deliver full power over a wide working range (curve A - B).

Standard PTO speed is 540 rpm, at 2200 rpm, where full power is available for hard work, e.g. power harrowing. However, with the 540/540E PTO option, (and the lower engine speed) you can save considerable fuel . . . while still maintaining high power. Just shift into 540E and throttle back. You get approximately 80 per cent power at 1620 engine rpm while driving the PTO at 540 standard speed (B). You also operate in the low fuel consumption range (C). High torque rise (D - E) provides the power to pull through tough spots. (Also optional is 540/1000 rpm PTO.)

New John Deere Orchard Tractors

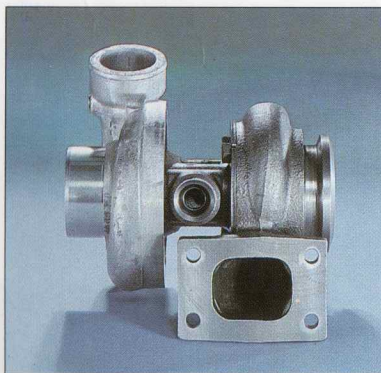
	Number of Cylinders	Displacement Centimeters ³	kW/PS	Torque Increase
1445 F	3	2940	31/42	18 %
1745 F	3	2940	35/48	24 %
1845 F	3	2940	41/56	20 %
2345 F	3 Turbo	2940	49/67	21 %





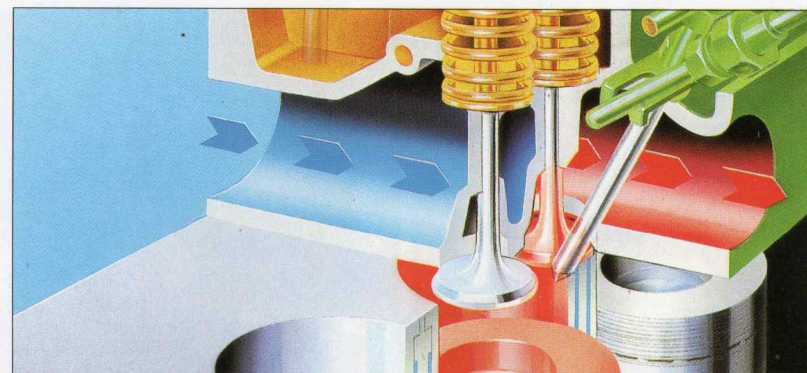
Power you can count on – year after year

John Deere orchard tractor engines are built tough. They are taken from the agricultural tractors and laid out for thousands of hours under hard conditions.



The largest model gives an extra kick

A turbocharger is standard equipment on the 67 DIN PS model. It efficiently delivers additional air for greater power, quick acceleration, cleaner fuel burn and extra torque. The pistons and connecting rods are stronger and more heat resistant. They're designed for years of hard work.

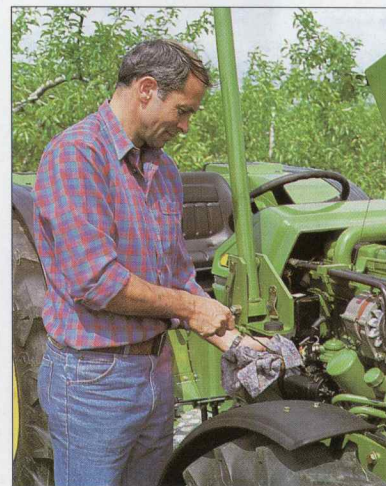
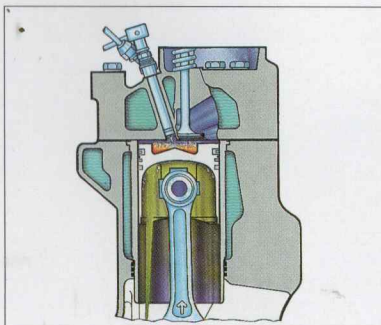


Cross-flow aspiration improves combustion

John Deere orchard tractor engines achieve cleaner, more complete combustion. Cross-flow aspiration positions the intake and exhaust manifolds opposite each other. This prevents preheating of incoming air by hot exhaust gases. The improved oxygen to fuel ratio provides greater fuel efficiency.

Reduces heat, improves reliability

Coolant is in direct contact with cylinder liners for best heat dissipation. Additional cooling and lubrication comes from under-piston spray cooling.



A quick check and you're on your way

All service points on John Deere orchard tractors are conveniently located for fast and easy maintenance. Simple maintenance saves you time. Plus, it helps promote proper machine care for quality tractor performance.

Compact power includes an efficient, responsive hydraulic system



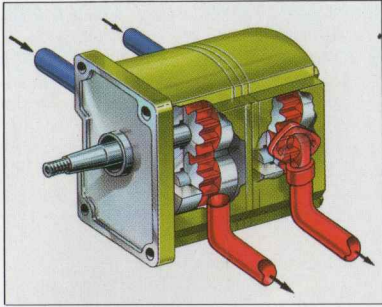
Load, depth and mixed: Control without confusion

Two levers accurately adjust load, depth and mixed control. You can set them both to work equally, or have one override the other . . . up to 100 percent. The easy adjustments ensure proper operation, and your implement works at the proper depth.

A sensitive top-link draft sensing system automatically compensates for draft changes. It makes this a truly useful tractor for all types of orchard work.

High lift capacity that won't let you down

Heavy implements are no problem for a John Deere orchard tractor. Front-end stability and powerful lift capacity lets you use a wide range of tillage, mowing and branch shredding tools.



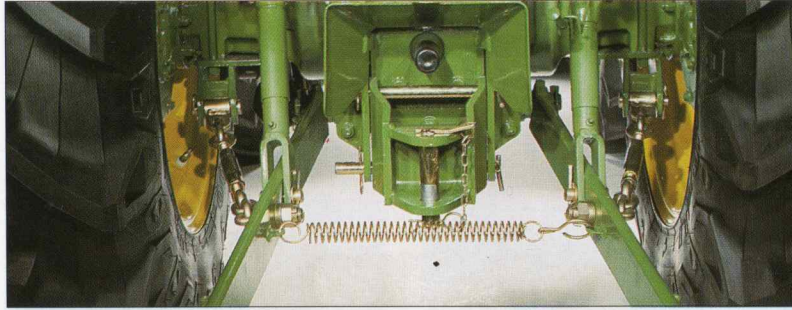
One 33-litre pump standard; tandem 66-litre pump (2 x 33-litre) optional

Our open-centre hydraulic system delivers controlled flow power to the hitch, steering system and SCVs. The optional tandem pump delivers 66 litres. It lets you double implement control capacity. You can operate a variety of implements with ease.



Change from Category 1 to Category 2 in seconds

It's very easy. Just unhook the pins. Remove the Category 1 balls from the 3-point hitch linkage. Replace them with Category 2 balls, and return the pins. That's it. There's almost no time wasted. Plus, the lower links offer enough range for easy hookups.



Stabiliser chains or bars available

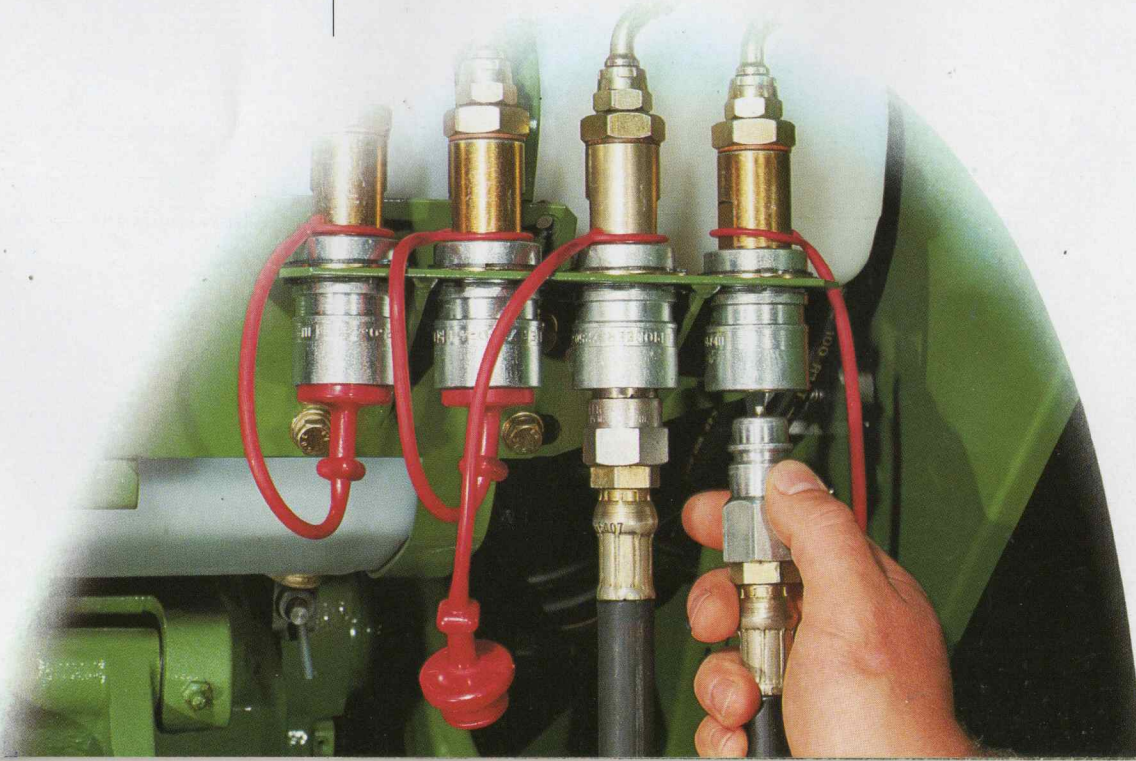
Turnbuckle adjusted stabiliser chains are standard equipment. They prevent implement sidesway. They are particularly useful when working on hillsides or with heavy implements. Optional stabilizer bars are also available.



Choose from a variety of SCV options

The pressure-less hydraulic oil return line is standard equipment. You can equip a John Deere orchard tractor with up to six single/double acting SCVs (3 to the rear, 3 mid-mounted). SCV levers are conveniently located to the right of the operator's seat within easy reach. You have the choice among the following options:

- Single-acting with fixed position (for hydraulic motors)
- Double acting, adjustable to single-acting
- Double-acting with fixed position on both sides (for hydraulic motors)
- Double-acting with float (4th) position (for front-end loaders)



Extremely manoeuvrable in no round-about way



Our narrow profile lets you work in a wide variety of tree spacings. The minimum width is only 1312 mm with 12.4-24 (998 mm tread) tyres. The adjustable wheel tread lets you position the front wheels to work from 1125 to 1496 mm and the rear wheels to work from 998 to 1474 mm depending on tyre size. The short 1835 mm wheelbase also provides outstanding manoeuvrability. These tractors are narrow enough to fit on pavements for community work.





Some versions have very high working standards

There are no U-joints, so branches can't hamper performance. The front axles are tightly sealed to protect against dirt, water or branch debris. They are virtually maintenance free. Plus, you get plenty of clearance.

Two-wheel-drive tractors feature 450 mm of ground clearance. Four-wheel drives have a centre-line drive axle and offer 370 mm of clearance from the ground to the centre of the front axle. The height of the steering wheel above the ground is only 1340 mm (High clearance version not available in the U.K.).



Telescoping steering wheel for extra clearance

Here's more proof that these are true orchard tractors. You can lower the telescoping steering wheel to gain additional clearance for working under low-hanging branches. Raise it to improve comfort when all's clear.



Other versions keep a very low profile

Our low-profile versions are only 1250 mm tall from the ground to the steering wheel. The height from the ground to the roll-guard (in up position) is only 1990 mm (12.4-24 tyres). With optional cab, and 12.4-24 tyres height is only 2001 mm. Clearance from the centre of the front axle to the ground is 350 mm on 2WD tractors and 240 mm on 4WD tractors.



Its light weight means that you can work after a rain shower

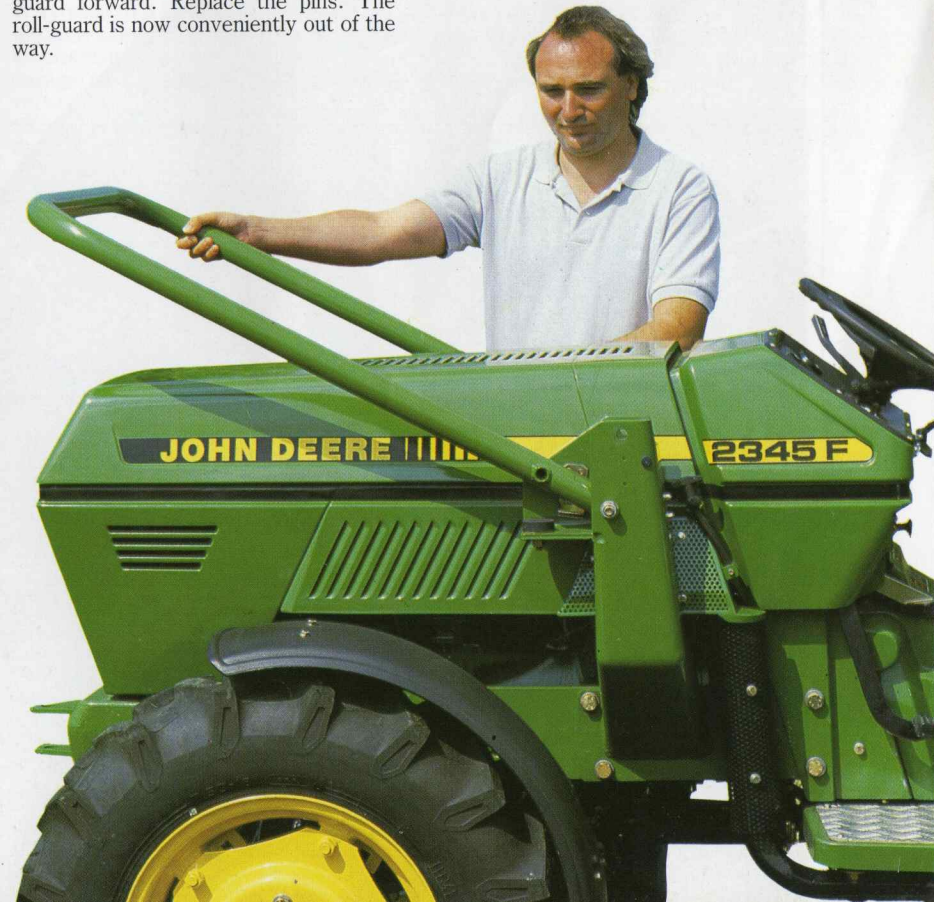
Conventional tractors or standard-model adaptations have no business being in an orchard. John Deere does. Our orchard tractors are light weight, so you can work in wet or dry conditions with less fear of tree injury or soil compaction. The forward-positioned centre of gravity improves stability. Why risk compaction or root damage? Get a John Deere.

Roll-guard folds out of the way

Here's one roll-guard that won't get in the way. Simply remove the attaching pins on each side of the tractor and fold the roll-guard forward. Replace the pins. The roll-guard is now conveniently out of the way.

Retractable lights that won't go out on a limb

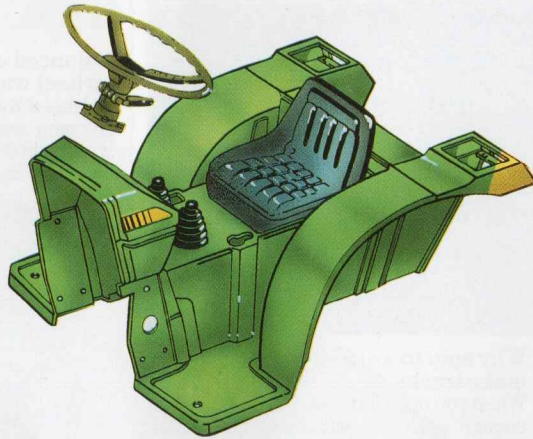
Innovative features such as the fully retractable lights are an asset for working around trees. Just push them down, and they won't touch a branch. To shed light later, simply release the latch and the lights pop up.



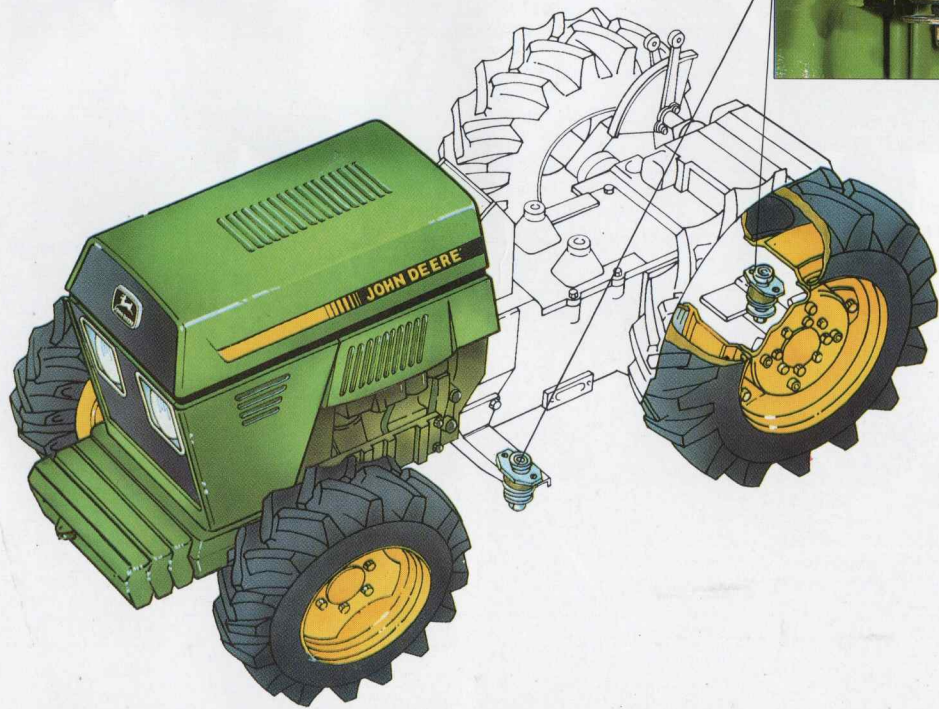
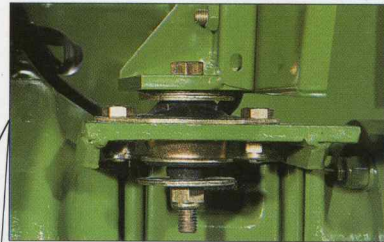
**Shift-on-the-go synchronised
transmission standard;
creep along or speed along**



Feeling comfortable on the job is a big part of feeling comfortable with it



Special rubber mounts absorb the vibrations, so you won't
Now you can have comfort, first class. The operator's platform is independently attached to the tractor with four rubber mounts. This innovation helps shield you from tiresome vibrations. Once in the seat of a John Deere orchard tractor, you may never want to get out of it.



An ergonomic extra: All the levers are where your hands expect them to be

These tractors were not only designed and styled to fit an orchard . . . they were also built to fit the operator. All the levers . . . PTO, 4WD, SCVs, transmission . . . are located for quick and easy operation. They are arranged to meet your needs.



Transport at a brisk 30 km/h
 Time waits for no one. So if you're going to your orchard, or to the market, you won't waste any time on the road. Transport speed is a fast 30 km/h. (Note: This operator is enjoying a comfortable ride in the unique removable cab option.)

Stay informed of tractor functions

A substantial, fully instrumented dashboard keeps you informed of a variety of tractor functions. The dash is easy to read, and offers critical information. Indicator lights respond to PTO, engine oil pressure, steering oil pressure, fuel, headlights/high-beam, hand brake, turn signals, pre-heating system, 4WD, hydraulics, air filter and alternator. Large gauges indicate engine rpm, ground speed and coolant temperature.

Easy on, easy off

Compare John Deere to other so-called orchard tractors. We offer compact power with a roomy operator's station. Our walk-through design offers excellent access. Getting on and off is easier.



Enjoy a cool breeze

Both the front and rear windows on the special removable cab option open wide. Fresh air can circulate freely through the operator's station. On hot days or cool, you'll be glad you bought a John Deere orchard tractor.

You're only 4 pins away from a warm cab

Work year-round in complete comfort. Simply position the optional cab on the tractor mounts. Insert four pins and connect the heater hoses. You're ready to go. The view is excellent. And an optional heater is available to take out the autumn chill. It gets its energy from the tractor's cooling fluid. No added fuel is burned to reduce fuel efficiency.



Specifications



Specifications and design are subject to change without notice, and can vary from country to country. Please check with your local dealer.

Model	1445 F	1745 F	1845 F	2345 F
Power				
Engine DIN PS/kw	42 PS/31	48 PS/35	56 PS/41	67 PS/49
Engine				
Number of cylinders	3	3	3	3 Turbo
Displacement	2940 cm ³	2940 cm ³	2940 cm ³	2940 cm ³
Bore/Stroke	106.5 mm/110 mm	106.5 mm/110 mm	106.5 mm/110 mm	106.5 mm/110 mm
Rated speed	2300	2300	2400	2300
Max. torque Nm/rpm	152/1300	180/1400	195/1300	245/1500
Percentage increase	18	24	20	21
Cooling			Liquid	
Optimum fuel consumption g/kWh			215	
Fuel injection pump	2-plunger	2-plunger	4-plunger	4-plunger
Oil change interval			Distributor type	
Air cleaner			200 hours	
			Dry type with safety element	
Transmission				
Type			Synchronised gears 8 + 4 (16 + 8 creeper)	
Lubrication			Pressure system	
Differential lock			Mechanical collar	
PTO				
Type:			Independent	
Speeds:			540/ground	
Standard:			540/540E/ground	
Optional:			540/1000/ground	
Brakes				
Type			Oil-cooled, mechanically actuated	
Parking brake			Standard equipment	
Hydraulic system				
Type			Open Centre	
Pump capacity			33 L Standard	
Optional pumps			Tandem 2 x 33 L = 66 L	
System pressure			180 bar	
Three Point Hitch-Rear				
Category			I or II N	
Hitch response			Top-link sensing	
Control positions			Load, Depth, Mixed, Float	
Maximum lift capacity			2150 kp	
Lift force through full				
Lift range, (610 mm behind				
hitch points)			1450 kp	
Stabilizers			Chains Std./Bars Opt.	
Selective control valves				
Max. no. of SCV Sin./Dbl.			3 rear-mounted (6 outlets) + 3 mid-mounted (6 outlets)	
Steering:				
Type			Hydrostatic balanced	
Electrical system:				
Alternator			35 A	
Batteries			100 Ah	
Starter			3 kW/4 PS	
Capacity:				
Fuel tank			40 L	
Tyre Sizes:				
Low Profile: (standard in the U.K.)				
2WD front	7.00-12	7.00-12	7.00-12	6.50-16
back	11.2-24	12.4-24	14.5-20	380/70-24
4WD front	6.50-16	9.00/75-16	10.0/75-15.3	280/60-15.5
back	11.2-24	12.4-24	380/70-24	14.5-20
High profile:				
2WD front	6.50-16	7.50-16	7.50-16	6.50-16
back	13.6-24	12.4-28	14.9-24	11.2-28
4WD front	8.25-16	8.25-16	7.50-18	250/70-18
back	11.2-28	13.6-24	12.4-28	14.9-24
				7.50-18 - 14.9-24

Dimensions

Height to cab	
Low clearance (12.4-24 Tyres)	2001 mm
High clearance (13.6-24 Tyres)	2072 mm
Height to roll-guard (foldable)	
Low clearance (12.4-24 Tyres)	1999 mm
High clearance (13.6-24 Tyres)	2075 mm
Height to steering wheel	
Low clearance (12.4-24 Tyres)	1250 mm
High clearance (13.6-24 Tyres)	1340 mm
Wheelbase 2/4WD	1835 mm
Minimum width (12.4-24 Tyres)	1312 mm
Overall length	3100 mm
Ground clearance	
Low clearance	
2WD	350 mm
4WD	240 mm
High clearance	
2WD	450 mm
4WD	370 mm
Treads front	
2WD	1146-1447 mm
4WD	1125-1496 mm
Treads rear	
2WD	998-1474 mm
4WD	998-1474 mm
Turning radius	2WD 3.23 m
	4WD LC 3.98 m
	4WD HC 3.75 m

Weights

w/ROPS/Cab	
Low clearance	
2WD	1840/1955 kg
4WD	1940/2055 kg
High clearance	
2WD	1840/1955 kg
4WD	1990/2105 kg
Max. allowable weight	3400 kg