## AGROTRAC 610 • 620



# COMFORTABLE, ERGONOMIC AND FUNCTIONAL



Intended for professionals involved with large-scale enterprises, and for contractors, Agrotrac 610 and 620 models display attributes that are optimized at the design stage with maximum productivity in view. Capability is all-important for these tractors, which are designed for heavy workloads both in the field (ploughing and seed-bed

preparation) and on the road (transport duties). Advanced technology is applied to the turbo-intercooled engine with electronic management, ensuring compliance with Euro 3A emissions standards.

Two types of transmission (top speed 40 km/h), and disc brakes on all four wheels, allowing operation at high speed and in complete safety.

The Agrotrac 610 and 620 specification package is rounded off by a roomy cab of ergonomic and functional design, creating the ideal environment for an operator to work with total peace of mind and in absolute comfort.

#### ADVANTAGES

- Euro 3A turbo/intercooled engines with electronic management, ideal for largescale enterprises and contractors who want a simple machine capable of high productivity.
- Optimum power-to-weight ratio and high load capacity, allowing operation with
- extra-wide implements and reducing soil compaction to a minimum.
- Top speed 40 km/h, two types of transmission with Hi-Lo or creeper and mechanically operated shuttle giving the right speeds for all situations, in the field and on the road.
- Powerful hydraulic system with 7,000 kg lifting capacity.
- Maximum safety under all operating conditions, with brakes operating on all 4 drive wheels.



An efficient 4-speed ventilation system circulates a perfectly measured flow of air through 18 adjustable vents, regulating the temperature inside the cab at a level guaranteed to provide maximum operator comfort, whatever the climatic conditions.



An uninterrupted view topside. The high visibility cab features a glass hatch that takes up almost the entire roof area, allowing the driver to keep a constant visual check on operations overhead when using a front loader.



The Agrotrac instrument panel: clear and complete information on the operating status of the tractor.



Engine switched on and off using starter key.



Everything in place and ready to hand, with controls on the driver's right.



Cab windows fitted with sun blinds for safe driving on the road.

### A functional and comfortable cab

Silent-block mountings for the smoothest of rides, this is a cab that anyone climbing aboard an Agrotrac 610 or 620 will take to immediately: optimum visibility too, with the exhaust pipe tucked against the corner post, a hood with rounded contours, and slimline fenders.

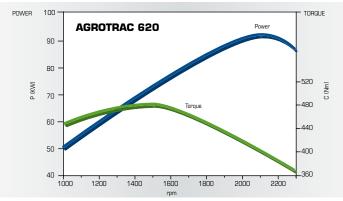
Exceptional levels of comfort are assured by a spacious driving position and a logical layout of the controls, all located on the driver's right.

Self-cleaning steps and a wide opening door allows access to the cab.

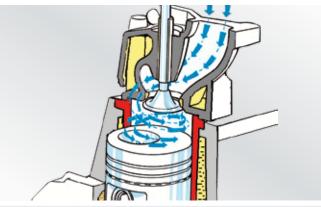
A powerful lighting system with 6 work lights: four at roof level — 2 at the front and 2 at the rear — and 2 mounted at midheight for enhanced night vision.

### UNLIMITED POWER.





Maximum performance always delivered, and with power and torque to spare.



The perfect geometry of the combustion chamber and the special fuel injection system ensure compliance of Agrotrac 610-620 engines with Euro 3A emissions standards.

The Agrotrac 610 rated 140 HP (103 kW) and the 620, rated 163 HP (120 kW), are equipped with powerful and economy-conscious engines designed to run for hours on end, delivering maximum performance. The engine specified for this range of machines is the turbo-intercooled 6-cylinder 1000 Series Euro 3A power unit, equipped with individual injection pumps, one to each cylinder, operating at high pressures (up to 1,400 bar) to ensure efficient atomization

of the fuel. The injection pipelines are notably short and all the same length, assuring fast delivery to all cylinders.

Optimum combustion is guaranteed both by strong turbulence of the inducted air, and by the special configuration of the combustion chamber, which ensures fuel and air are mixed thoroughly together.

The engine is equipped with hydraulic roller tappets for precise injection timing. When the oil is cold, the plunger is lifted marginally

so that the injection can be suitably advanced: besides optimizing efficiency from the word go, this also eliminates the annoyance of white smoke, produced typically when engines are started cold. With a generous capacity tank (produced by a rotoforming process) holding 300 litres, there will be few refuelling stops.

An electromagnetic component acts directly on the rack driving the injection pumps, proportioning the injection volume

#### ADVANTAGES

- Tried and tested Euro 3A compliant turbointercooled engines, renowned for economy and reliability
- Great flexibility, with high torque and constant power.
- Two possible choices of transmission. Both rated 40 km/h, with 4-speed all-
- synchromesh gearbox and a choice of Hi-Lo shift or creeper range.
- Mechanical shuttle with single operating lever, for swift and precise change of direction
- Optimum spacing of gearbox ratios, to provide best possible choice of speeds to suit different applications.
- Always maximum power at the P.T.O. shaft, which is driven directly by the engine.
- Two-speed P.T.O. (540/1,000), with oil-immersed multi-disc clutch, soft engagement and maximum safety in operation.





Engine speed controlled by a lever on the cab door post, with the facility of memorizing a set speed.



P.T.O. clutch operating lever



16FWD+12REV transmission with creeper range or 24FWD+12REV with Hi-Lo.

exactly to the load on the engine and the corresponding power output required, optimizing fuel consumption. These are all factors that help to increase productivity, day after day.

## Transmissions ideal both for heavy arable work and for transport duties. All with a top speed of 40 km/h.

The gears are fully synchromesh, engaged by a dry-type hydrostatically operated main

clutch with cerametallic discs, for optimum efficiency and productivity.

4-speed synchromesh gearbox, 3 ranges and hi-lo shift (reducing each of the forward gear speeds by 20%) giving a total of 24 forward ratios and 12 reverse; shuttle and hi-lo operated by a single lever for swift and instantaneous shifts.

Alternatively, there is a 16FWD+12REV version (4-speed synchromesh gearbox and 3 ranges including creeper), with a single

lever operating the shuttle and creeper. Minimum ground speed 0.4 km/h.

The 2 speed power take-off (540/1,000) with oil-immersed multi-disc clutch is engaged by means of a mechanical control located to the driver's right. A direct coupling between P.T.O. and engine helps to minimize power losses and reduce noise.

# HYDRAULIC POWER, TOTAL PRODUCTIVITY



Agrotrac machines are equipped with a powerful and dynamic hydraulic system able to accommodate even the most complex rear-mounted implement, with an open centre hydraulic circuit served by a pump rated 68 l/min, enabling operation with all kinds of implements, including those with a considerable working width. Finally, there is a mechanically controlled rear lift with a rated capacity of 5,400/7,000 kg and, completing the hydraulic system, a bank of 4 or 6 auxiliary spool valve ports.

A set of 4 hydrostatically operated oilimmersed disc brake assemblies will bring the Agrotrac 610 and 620 to a halt in complete safety, even when heavily loaded. The steering is light and effortless, thanks to a hydraulic system that includes a separate pump supplying oil to two double-acting rams; these are located behind the front axle, to guarantee maximum protection in the event of accidental impact. The steering angle is 50°.

Increased traction is provided by mechanically operated front and rear differential locks (pedal control) designed to engage 100% in critical operating conditions.

These machines have no problem operating with heavy implements mounted to the rear linkage, as power from the engine is

transmitted to the rear wheels via heavy duty epicyclic final drive units. A rear axle with adjustable track width is easily adapted to suit the type of crop and cultivation.

### **ADVANTAGES**

- High lifting capacity, up to 7,000 kg.
- Hydraulic system with 68 l/min rated flow.
- Auxiliary spool valves with 4 or 6 ports suitable for all types of implements.
- Maximum traction assured by 100%-locking differentials front and rear.





Four wheel drive engagement lever for Agrotrac 610-620 models.



Front and rear differentials with 100% locking action are conveniently pedal operated. (Agrotrac 610-620).



Two levers are used to control the rear lift links: the yellow lever raises or lowers the implement; the green lever is used to select the type of control (position, draft and mix). The blue levers operate the various auxiliary spool valves — single acting, double acting, kickout or detent.

## SWIFT AND SIMPLE MAINTENANCE







Easily accessible engine oil dipstick.



The engine air cleaner is serviced easily and in minutes.

Long servicing intervals and ease of maintenance are assured, given that all the main service points on the tractor can be accessed in moments: the side panels are easily removed (no tools required) and the hood is opened simply by pressing a button. All the main engine service points are located on the right hand side, and easily accessible. The engine oil filter and

engine oil level can be checked without opening the hood. And to save time and expense, the recommended oil change intervals are particularly long: 500 hours for the engine oil, and 1,200 hours for the transmission oil.

## TECHNICAL DATA

		610	620				
	Version	4WD	4WD				
GINE		1000.6 WTI TIER III A	1000.6 WTI TIER III A				
linders / Displacement	n°/cm³	6/6,000	6/6,000				
ntake		Turbo/Intercooled	Turbo/Intercooled				
aximum power, Homologated (2000/25/EC)	HP/kW	140/103	163/120				
gine rated speed	rpm	2,350	2,350				
aximum torque	Nm	510	624				
eed at maximum torque	rpm	1,600	1,600				
rque rise	%	22	27				
oling		liquid-oil					
gine control (governor)		electronic					
gine air filter		dry type with dual element					
encer under hood		with vertical exhaust					
el tank capacity std/opt	litres	160+140					
VENSIONS and WEIGHTS (with rear tyres)		16.9 R38	18.4 R38				
eximum length without link arms	mm	4,264	4,324				
idth min-max	mm	2,170-2,670	2,216-2,424				
ax. height at cab	mm	2,977	2,810				
ound clearance	mm	500	530				
heelbase	mm	2,750	2,750				
ont track width min-max	mm	1,826-1,944	1,826-1,944				
ar track width min-max	mm	1,794-1,802	1,794-1,802				
eight with cab/platform	kg	5,450-5,250	5,700-5,500				
ANSMISSION							
arshift clutch		disc, self-adjusting, hy	drostatically operated				
echanical transmission 16 FWD + 12 REV		4 speed synchromesh x 3 ranges with creeper					
echanical transmission 24 FWD + 12 REV		4 speed synchromesh x 3 ranges with Hi-Lo					
aximum speed	km/h	40					
uttle		mechanical shuttle					
ar differential engagement		mechanical - epicyclic final drive units					
prication		pressure					
AR P.T.O. REAR P.T.O.							
ıtch		oil-immersed multi-disc,	independently engaged				
eeds	rpm	540 - 1,000					
AKES AND STEERING							
akes		oil-immersed	d single disc				
rking brake		oil-immersed multi-disc, mechanically operated					
drostatic steering with independent pump		double-acting, with independent pump					
eering angle	4WD	50°					
ONT AXLE							
		mechi	anical				
ont differential lock		mechanical					
ont ballast weights		maximum 12 x 40 kg					
drostatic steering with independent pump eering angle DNT AXLE  ur wheel drive engagement ont differential lock	4WD	double-acting, with independent pump 50°  mechanical mechanical					

		610			620				
HYDRAULIC LIFT									
Rear lift		mechanical							
Maximum lifting capacity	kg	5,400 or 7,000							
Pump flow rate	l/min.	68							
Auxiliary hydraulic control valves	No. ports	4/6							
Three-point linkage (lift links + top link)		fixed link ends or auto hitch ends							
RH lift rod and stabilizers		with mechanical adjustment							
DRIVING POSITION									
Cab		mounted on 4 silent-blocks, internal ventilation system, 2 doors and high visibility roof							
Instrumentation		analogue							
Cab climate control		heater and air conditioning							
Driver seat		adjustable for height, distance and weight of occupant							
16 FWD + 12 REV - TRANSMISSION WITH CREEPER - SPEEDS IN KM/H AT 2,300 ENGINE RPM WITH 16.9 R34 REAR TYRES									
	Creeper	•	Low	Medium		High			
1	0.43		1.19	3.78		12.01			
2	0.65		1.77	5.65		17.94			
3	0.97		2.64	8.40		26.70			
4	1.36		3.70	11.77		37.41			
REVERSE SPEEDS ARE THE SAME AS FORWARD SPEEDS WITHOUT CREEPER									
24 FWD + 12 REV - TRANSMISSION WITH HI-LO - SPEEDS IN KM/H AT 2,350 ENGINE RPM WITH 18.4 R38 REAR TYRES									
	L	Low		Medium		High			
	L SP	L	11	M	H SP	Н			
1	0.97	1.′		3.78	9.85	12.01			
2	1.45	1.7		5.64	14.71	17.94			
3	2.17	2.6		8.40	21.90	26.69			
4	3.04	3.7	70 9.66	11.77	30.69	37.41			
REVERSE SPEEDS ARE THE SAME AS FORWARD SPEEDS WITHOUT HI-LO									

### THE SAFETY AND QUALITY OF DEUTZ-FAHR ORIGINAL REPLACEMENT PARTS



Original service: a reasoned choice There are plenty of people who can do almost every kind of repair themselves. But only the DEUTZ-FAHR specialist dealer knows your machine inside-out, right down to the smallest detail. Only authorized dealers have regularly trained and highly qualified personnel working with the professional tools and diagnostic equipment needed to perform every kind of servicing job correctly, and in complete safety.

### Original parts: a reasoned choice

For the sake of your tractor too, trust only DEUTZ-FAHR original parts: these undergo rigorous selection procedures and stringent quality controls, to ensure the absolute efficiency of all components, and guarantee trouble-free running and long service life.





For more information, contact your DEUTZ-FAHR dealer:

Technical data and pictures are guideline only. Committed to delivering a product more and more in line with your needs, DEUTZ-FAHR reserves the right to update the specifications of its machines at any time without notice.

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