



Spire F/S/V

90 | 95 | 100 | 105 | 115

CAB - Stage V



Spire F/S/V Stage V: Function and Style.

The new Lamborghini Spire F/S/V Stage V range is the leader among specialised tractors for customers who, in addition to performance and functionality, are looking for a unique style. Lamborghini Trattori has always been the bearer of refined and functional design for all its ranges. And this tradition is continued by the new generation of machines specifically for the fruit orchard and vineyard. This is no mean feat when you consider the need for the compactness and agility in tight spaces required by specialised tractors of this type, while at the same time not reduce performance and also meeting emission limits. The attractive lines of the Lamborghini Spire F/S/V Stage V also respond to the functional needs of these machines, ensuring an unobstructed view ahead of and to the sides of the tractor and the extraordinary agility needed for manoeuvring between narrowly spaced rows without coming into contact with vines and trellises.

Engine

Power and maximum efficiency under a compact hood.

The modern FARMotion 35 [3-cylinder] and 45 [4-cylinder] engines for the Lamborghini Spire F/S/V Stage V are electronically controlled turbo intercooled engines with power ratings from 91 to 116 HP [67 to 85 kW]. The use of the latest emission control solutions ensures that the tractors comply with the most stringent international regulations, thanks to a pool of exhaust gas treatment systems such as externally cooled EGR, DOC and DPF and the SCR system based on AdBlue injections, to cut NOx. The careful layout of all these elements has made it possible to locate everything without affecting the overall dimensions of the tractor. FARMotion 35 and 45 can now run with alternative fuels, being officially certified for HVO [Hydrotreated Vegetable Oil].

Transmission

Transmissions for every operational requirement.

First of all, you can opt for the new mechanical 4-speed gearbox, which can be enhanced with the mechanical underdrive to double the number of forward speeds. The underdrive function is also available on the 30+15 5-speed transmission. The underdrive engages mechanically via an ergonomic control integrated into the shuttle lever and guarantees a minimum creeper speed of just 170 m/h [Spire V]. Another feature introduced with the Spire F/S/V Stage V is the Hi-Lo transmission with two Powershift speeds. Lastly, there is the famous 45+45 transmission, with 5 ground speed gears and 3 Powershift speeds, which represents excellence among specialised tractor





transmissions. The Powershift of the Spire F/S/V operates in both forward and reverse gears, allowing precise speed control even when manoeuvring at the end of the field or loading pallets with the rear forklift. All 5-speed transmissions, from 15+15 to 45+45, feature the OverSpeed function, which reaches 40 km/h at economical engine speed. The Spire F/S/Vs with hydraulic shuttle are equipped with the exclusive SenseClutch function - which allows the aggressiveness of the shuttle during direction changes to be adjusted - and Stop&Go: when activated, the driver can stop and restart the tractor by simply pressing and releasing the brake pedals without having to operate the clutch pedal.



PTO: customised installation.

The PTO of the Spire F/S/V can be configured according to different operational needs: the 540 rpm and 540ECO are standard, while the 1000 rpm or ground speed PTO can be added upon request, selectable either with an external control or a practical control in the cab. You can choose between a fixed or a practical interchangeable shaft. On the Spire F also between mechanical engagement or electro-hydraulic engagement. In the first case the PTO is engaged by means of the mechanical lever that controls the PTO clutch, so the driver can directly modulate the PTO engagement. This system is useful when tractors are used with high inertia implements (stone crushers or blowers with large fans). On the other hand the PTO with electro-hydraulic engagement can be easily and conveniently engaged using a special switch. Spire F/S/V also features Auto PTO mode, which automatically engages and disengages depending on the position of the implement connected to the 3-point hitch; other options on the Spire F/S/V include a 1000 rpm front PTO.

Top hydraulics configurability.

Specialised orchard and vineyard tractors are required to carry out work that is very different from that carried out by conventional tractors: modern vineyard equipment requires high hydraulic power and a large number of hydraulic connections, both at the rear and central positions. On the Lamborghini Spire F/S/V Stage V, a state-of-the-art hydraulic system has been installed, based on a single or dual tandem pump with flow rates up to 68 l/min, to effectively meet all possible hydraulic requirements. In any case, there is always an independent pump dedicated to steering - with a flow rate of up to 40 l/min - for smooth steering in all conditions. At the rear, up to 3 mechanical double-action spool valves are available, while - for cab models - different hydraulic configurations are available in the mid mounted position: 2 to 5-ways duplicated from the rear and a free return. The spool valves of Spire F/S/V Stage V can be controlled by single levers or by the exclusive cross lever, which allows the operator to control 4 hydraulic ways while keeping his hand on a single control. The functionality and operational quality of the Lamborghini Spire F/S/V can also be clearly seen when working with the rear forklift. The rear lift of

Spire F/S/V is always electronically controlled and has a lifting capacity of 3130 kg [2600 kg on Spire S and V]. This can be increased to 3940 kg with additional auxiliary cylinders. On the outside, the convenient switch on the rear of the machine allows the rear attachments to be easily hooked up with precise and progressive movements of the arms, the lowering speed of it can be adjusted via a dial. The optional front lift has a lifting capacity of up to 1500 kg: it was specially designed by Lamborghini Trattori for this type of tractor and is therefore fully integrated with the front chassis of the Spire F/S/V. When not in use, the lower link arms of the lift can be folded to minimise the overall length of the machine.



Comfort, stability and safety.

The front axle of the Spire F/S/V, which is specially designed for specialised tractors, is available in several variants depending on operating requirements. Upon request, a front axle with independent front wheel suspension can be fitted on all models. This exclusive technology allows for independent vertical travel of each front wheel. This provides maximum suspension in all situations, integrating the functions of roll

stabilisation when cornering (Anti-Roll) and Anti-Dive, increasing braking safety. Regardless of the type of front axle - fixed or suspended - brakes on all four wheels are standard, as is the 100% differential lock. The SDD system which halves the number of steering wheel turns required to make a complete turn is available upon request on cab models as is the Auto 4WD system, which automatically engages and disengages 4-wheel drive according to forward speed and steering angle.



New cab: the tunnel disappears even with mechanical and Powershift transmissions.

The brand new cab of the Lamborghini Spire F/S/V Stage V has been completely re-developed to improve equipment, operational functionality and comfort during travel and work. But, above all, it is a safe environment in which the driver can work in a protected and risk-free manner. All models are equipped as standard with a suspension system based on 4 Hydro Silent-Blocks, ensuring an effective reduction in vibrations transmitted to the driver. Thanks to the absence of a central tunnel, the cab of the Spire F/S/V has a completely flat floor, providing the driver with optimal legroom, even with the narrowest



cab frame (Spire V). In addition, the absence of any steps inside the cab provides extremely easy access to the driver's seat. The cab of the new Lamborghini Spire F/S/V has been redesigned not only for operating comfort, but also and above all for on-board safety. The Cat.4 filtration system, available as an option, acts on both air filtration and cab pressurisation, guaranteeing the protection of the driver when carrying out phytosanitary treatments.



Precision is the basic prerequisite for productivity.

The tractors of the Spire F/S/V family offer class-beating technology, letting you get on with your work with even more intelligent solutions. The tractors may be equipped as an option with the most advanced and sophisticated telemetry systems. The connectivity solutions offered by Lamborghini Trattori make interaction between the office and machinery even simpler. The new SDF Fleet Management suite puts the user in total control of the new Spire F/S/V. The application lets the owner keep track of the position of the tractor in real time, wherever it is. SDF Fleet Management can also be used as an effective tool for planning maintenance, by making use of its notification functions, and for acquiring data relative to performance and fuel consumption. With the SDF Fleet Management application, dealers can always assist drivers in case of any upcoming issues that may occur. This reduces downtime and increases operation reliability of customer's machine.

 **SDF** Fleet Management

With the new SDF Fleet Management application, SDF offers customisable solutions for the real-time management of key data concerning the operation of the machine. Our clients benefit significantly from being in total control of their machines and from the ability to manage a host of vital data, such as tracking data relative to activities. The SDF Fleet Management suite of applications is the centralised control interface for analysing telemetry data from Lamborghini Trattori machines. Tractor data is transmitted in real time over a mobile internet connection to the application, which allows users to analyse, monitor and even optimise the use of their machinery. The "map" view shows the location and status of machines or an entire fleet, and can also display historical data. On request, you can set up virtual fences to receive warnings if a machine leaves the area. Error messages may be forwarded to the technical support team of the dealership, and used to predict failure and reduce unnecessary machine down time.

TECHNICAL DATA		SPIRE F				
		90	95	100	105	115
ENGINE						
Model		FARMotion 35	FARMotion 45	FARMotion 35	FARMotion 45	
Emission level		Stage V				
Aspiration		Turbo Intercooler				
Injection @ pressure	Type	Common Rail@ 2000 bar				
Cylinder/Displacement	n°/cc	3/2887	4/3849	3/2887	4/3849	
Max. power (ECE R120)	kW/HP	67/91	70/95	75/102	78/106	85/116
Power at rated engine speed (ECE R120)	kW/HP	63.5/86	66.4/90	71.1/97	74/101	80.6/110
Max torque @ 1400 rpm	Nm	372	389	417	433	472
Fuel tank capacity (with front lift/PTO)	l	81 (61)				
XL Fuel tank capacity (with front lift/PTO)	l	100 (80)				
AdBlue tank capacity	l	13				
TRANSMISSION - MECHANICAL SHUTTLE						
Number of speeds - 4 gears transmission		12+12 or 24+12 (with mechanical splitter) or 24+24 (with Hi-Lo 2-Powershift steps)				
Max. speed - 4 gears transmission	km/h	40				
Number of speeds - 5 gears transmission		15+15 or 30+15 (with mechanical splitter) or 30+30 (with Hi-Lo 2-Powershift steps) or 45+45 (with HML 3-Powershift steps)				
Max. speed - 5 gears transmission	km/h	40 ECO*				
TRANSMISSION - POWERSHUTTLE						
Number of speeds - 5 gears transmission		15+15 or 30+30 (with Hi-Lo 2-Powershift steps) or 45+45 (with HML 3-Powershift steps)				
Max. speed - 5 gears transmission	km/h	40 ECO*				
PTO						
PTO speeds		540/540ECO or 540/540ECO/1000				
Groundspeed PTO		<input type="checkbox"/>				
Front PTO 1000		<input type="checkbox"/>				
LIFT						
Electronic rear lift		<input checked="" type="checkbox"/>				
Rear lift capacity (STD/OPT)	kg	3130/3940				
Hydraulic right tie rod and stabilisers		<input type="checkbox"/>				
Front lift (1500 kg)		<input type="checkbox"/>				
HYDRAULICS						
Open centre hydraulic system (STD)	l/min	56				
Open centre hydraulic system with double pump (OPT)	l/min	68				
Rear spool valves (STD/OPT)	n°	2/3				
Flow regulator		<input type="checkbox"/>				
Rear free return		<input checked="" type="checkbox"/>				
Mid-mounted hydraulic ways - duplicated from rear (OPT)	n° of ways	2/4/5				
Mid-mounted free return		<input type="checkbox"/>				
BRAKES						
4 wheel braking		<input checked="" type="checkbox"/>				
Hydraulic trailer brake		<input type="checkbox"/>				
FRONT AXLE						
Electrohydraulic engagement for 4WD and Diff.Lock		<input checked="" type="checkbox"/>				
Auto 4WD		<input type="checkbox"/>				
Independent steering pump		<input checked="" type="checkbox"/>				
Steering Double Displacement (SDD)		<input type="checkbox"/>				
INDEPENDENT FRONT SUSPENDED AXLE (OPT)						
Adaptive-Damping, Active Self-Levelling functions		<input checked="" type="checkbox"/>				
Anti-Dive, Anti-Roll functions		<input checked="" type="checkbox"/>				
Differential Traction Control (DTC)		<input checked="" type="checkbox"/>				
CAB						
Flat floor		<input checked="" type="checkbox"/>				
Adjustable steering column		<input type="checkbox"/>				
Suspended on Hydro Silent-Block		<input checked="" type="checkbox"/>				
Cat.4 filtration system		<input type="checkbox"/>				
Liftable rear top roof		<input type="checkbox"/>				
Up to 6x LED working lights		<input type="checkbox"/>				
Bluetooth Radio		<input type="checkbox"/>				
CTM (EU)		<input type="checkbox"/>				
DIMENSIONS AND WEIGHTS						
With front tyre	Size	300/70 R20				
With rear tyre	Size	420/70 R28				
Wheelbase	mm	2044	2174	2044	2174	
Max. length	mm	3670	3800	3670	3800	
Total height - CAB	mm	2520				
Height at bonnet	mm	1475				
Width	mm	1624				
Weight - CAB	kg	3290-3880	3515-4105	3290-3880	3515-4105	
Total admissible load	kg	5200				

*according to rear tyres size

STD OPT Not available -

ENGINE		SPIRE S				
Model		90	95	100	105	115
Model		FARMotion 35	FARMotion 45	FARMotion 35	FARMotion 45	
Emission level		Stage V				
Aspiration		Turbo Intercooler				
Injection @ pressure		Common Rail@ 2000 bar				
Type						
Cylinder/Displacement		n°/cc	3/2887	4/3849	3/2887	4/3849
Max. power (ECE R120)		kW/HP	67/91	70/95	75/102	78/106 85/116
Power at rated engine speed (ECE R120)		kW/HP	63.5/86	66.4/90	71.1/97	74/101 80.6/110
Max torque @ 1400 rpm		Nm	372	389	417	433 472
Fuel tank capacity (with front lift/PTO)		l	75 (55)			
XL Fuel tank capacity (with front lift/PTO)		l	100 (80)			
Super narrow mid mounted implements fuel tank capacity (with front lift/PTO)		l	-	73 (53)	-	73 (53)
AdBlue tank capacity		l	13			
TRANSMISSION - MECHANICAL SHUTTLE						
Number of speeds - 4 gears transmission			12+12 or 24+12 (with mechanical splitter) or 24+24 (with Hi-Lo 2-Powershift steps)			
Max. speed - 4 gears transmission		km/h	40			
Number of speeds - 5 gears transmission			15+15 or 30+15 (with mechanical splitter) or 30+30 (with Hi-Lo 2-Powershift steps) or 45+45 (with HML 3-Powershift steps)			
Max. speed - 5 gears transmission		km/h	40 ECO			
TRANSMISSION - POWERSHUTTLE						
Number of speeds - 5 gears transmission			15+15 or 30+30 (with Hi-Lo 2-Powershift steps) or 45+45 (with HML 3-Powershift steps)			
Max. speed - 5 gears transmission		km/h	40 ECO*			
PTO						
PTO speeds			540/540ECO or 540/540ECO/1000			
Groundspeed PTO			<input type="checkbox"/>			
Front PTO 1000			<input type="checkbox"/>			
LIFT						
Electronic rear lift			<input checked="" type="checkbox"/>			
Rear lift capacity (STD)		kg	2600			
Hydraulic right tie rod and stabilisers			<input type="checkbox"/>			
Front lift (1500 kg)			<input type="checkbox"/>			
HYDRAULICS						
Open centre hydraulic system (STD)		l/min	56			
Open centre hydraulic system with double pump (OPT)		l/min	68			
Rear spool valves (STD/OPT)		n°	2/3			
Flow regulator			<input type="checkbox"/>			
Rear free return			<input checked="" type="checkbox"/>			
Mid-mounted hydraulic ways - duplicated from rear (OPT)		n° of ways	2/4/5			
Mid-mounted free return			<input type="checkbox"/>			
BRAKES						
4 wheel braking			<input checked="" type="checkbox"/>			
Hydraulic trailer brake			<input type="checkbox"/>			
FRONT AXLE						
Electrohydraulic engagement for 4WD and Diff.Lock			<input checked="" type="checkbox"/>			
Auto 4WD			<input type="checkbox"/>			
Independent steering pump			<input checked="" type="checkbox"/>			
Steering Double Displacement (SDD)			<input type="checkbox"/>			
INDEPENDENT FRONT SUSPENDED AXLE (OPT)						
Adaptive-Damping, Active Self-Levelling functions			<input checked="" type="checkbox"/>			
Anti-Dive, Anti-Roll functions			<input checked="" type="checkbox"/>			
Differential Traction Control (DTC)			<input checked="" type="checkbox"/>			
CAB						
Flat floor			<input checked="" type="checkbox"/>			
Adjustable steering column			<input type="checkbox"/>			
Suspended on Hydro Silent-Block			<input checked="" type="checkbox"/>			
Cat.4 filtration system			<input type="checkbox"/>			
Liftable rear top roof			<input type="checkbox"/>			
Up to 6x LED working lights			<input type="checkbox"/>			
Bluetooth Radio			<input type="checkbox"/>			
CTM (EU)			<input type="checkbox"/>			
DIMENSIONS						
With front tyre		Size	280/70 R18			
With rear tyre		Size	380/70 R28			
Wheelbase		mm	2086	2216	2086	2216
Max. length		mm	3670	3800	3670	3800
Total height - CAB		mm	2495			
Height at bonnet		mm	1475			
Width		mm	1380			
Weight - CAB		kg	3265-3865	3320-3920	3265-3865	3320-3920
Total admissible load		kg	5000			


*according to rear tyres size

STD OPT Not available -

TECHNICAL DATA		SPIRE V				
		90	95	100	105	115
ENGINE						
Model		FARMotion 35	FARMotion 45	FARMotion 35	FARMotion 45	
Emission level		Stage V				
Aspiration		Turbo Intercooler				
Injection @ pressure	Type	Common Rail@ 2000 bar				
Cylinder/Displacement	n°/cc	3/2887	4/3849	3/2887	4/3849	
Max. power (ECE R120)	kW/HP	67/91	70/95	75/102	78/106	85/116
Power at rated engine speed (ECE R120)	kW/HP	63.5/86	66.4/90	71.1/97	74/101	80.6/110
Max torque @ 1400 rpm	Nm	372	389	417	433	472
Fuel tank capacity (with front lift/PTO)	l	75 (55)				
XL Fuel tank capacity (with front lift/PTO)	l	100 (80)				
AdBlue tank capacity	l	13				
TRANSMISSION - MECHANICAL SHUTTLE						
Number of speeds - 5 gears transmission		15+15 or 30+15 (with mechanical splitter) or 30+30 (with Hi-Lo 2-Powershift steps) or 45+45 (with HML 3-Powershift steps)				
Max. speed - 5 gears transmission	km/h	40				
TRANSMISSION - POWERSHUTTLE						
Number of speeds - 5 gears transmission		15+15 or 30+30 (with Hi-Lo 2-Powershift steps) or 45+45 (with HML 3-Powershift steps)				
Max. speed - 5 gears transmission	km/h	40				
PTO						
PTO speeds		540/540ECO or 540/540ECO/1000				
Groundspeed PTO		<input type="checkbox"/>				
Front PTO 1000		<input type="checkbox"/>				
LIFT						
Electronic rear lift		<input checked="" type="checkbox"/>				
Rear lift capacity (STD)	kg	2600				
Hydraulic right tie rod and stabilisers		<input type="checkbox"/>				
Front lift (1500 kg)		<input type="checkbox"/>				
HYDRAULICS						
Open centre hydraulic system (STD)	l/min	56				
Open centre hydraulic system with double pump (OPT)	l/min	68				
Rear spool valves (STD/OPT)	n°	2/3				
Flow regulator		<input type="checkbox"/>				
Rear free return		<input checked="" type="checkbox"/>				
Mid-mounted hydraulic ways - duplicated from rear (OPT)	n° of ways	2/4/5				
Mid-mounted free return		<input type="checkbox"/>				
BRAKES						
4 wheel braking		<input checked="" type="checkbox"/>				
Hydraulic trailer brake		<input type="checkbox"/>				
FRONT AXLE						
Electrohydraulic engagement for 4WD and Diff.Lock		<input checked="" type="checkbox"/>				
Auto 4WD		<input type="checkbox"/>				
Independent steering pump		<input checked="" type="checkbox"/>				
Steering Double Displacement (SDD)		<input type="checkbox"/>				
INDEPENDENT FRONT SUSPENDED AXLE (OPT)						
Adaptive-Damping, Active Self-Levelling functions		<input checked="" type="checkbox"/>				
Anti-Dive, Anti-Roll functions		<input checked="" type="checkbox"/>				
Differential Traction Control (DTC)		<input checked="" type="checkbox"/>				
CAB						
Flat floor		<input checked="" type="checkbox"/>				
Adjustable steering column		<input type="checkbox"/>				
Suspended on Hydro Silent-Block		<input checked="" type="checkbox"/>				
Cat.4 filtration system		<input type="checkbox"/>				
Liftable rear top roof		<input type="checkbox"/>				
Up to 6x LED working lights		<input type="checkbox"/>				
Bluetooth Radio		<input type="checkbox"/>				
CTM (EU)		<input type="checkbox"/>				
DIMENSIONS						
With front tyre	Size	180/95 R16				
With rear tyre	Size	280/85 R24				
Wheelbase	mm	2086	2216	2086	2216	
Max. length	mm	3670	3800	3670	3800	
Total height - CAB	mm	2395				
Height at bonnet	mm	1440				
Width	mm	1166				
Weight - CAB	kg	3180-3690	3235-3745	3180-3690	3235-3745	
Total admissible load	kg	5000				

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Lamborghini Trattori is a brand of  SDF

