

# RUBIN GALILEO CAB SYSTEM



 **SAME**®

# THE DISCOVERY OF THE IDEAL POSITION.



The GALILEO Cab System is the most technologically advanced SAME cab, with automatic levelling as found on the most sophisticated combines, and it is the latest feature to enhance the prestigious RUBIN 160, 180 and 200 tractors.

An innovative system with an omnidirectional action that takes operator comfort to a new level.

Four pistons with integral position sensors keep the cab perfectly horizontal and cushioned at all times, automatically compensating for inclines of up to 25%, which translates into variations in level of up to 500 mm in a transverse direction and 700 mm longitudinally.

The electronic sensor system detects all changes in ground contours, but does not react to the normal ride movements of the tractor: an intelligent solution that eliminates undesirable pitch and roll.



Total comfort and convenience for the operator also means low maintenance, for reduced downtime and operating costs. And the new cab design is also innovative in this respect. The system sensors are located inside the pistons, where they are

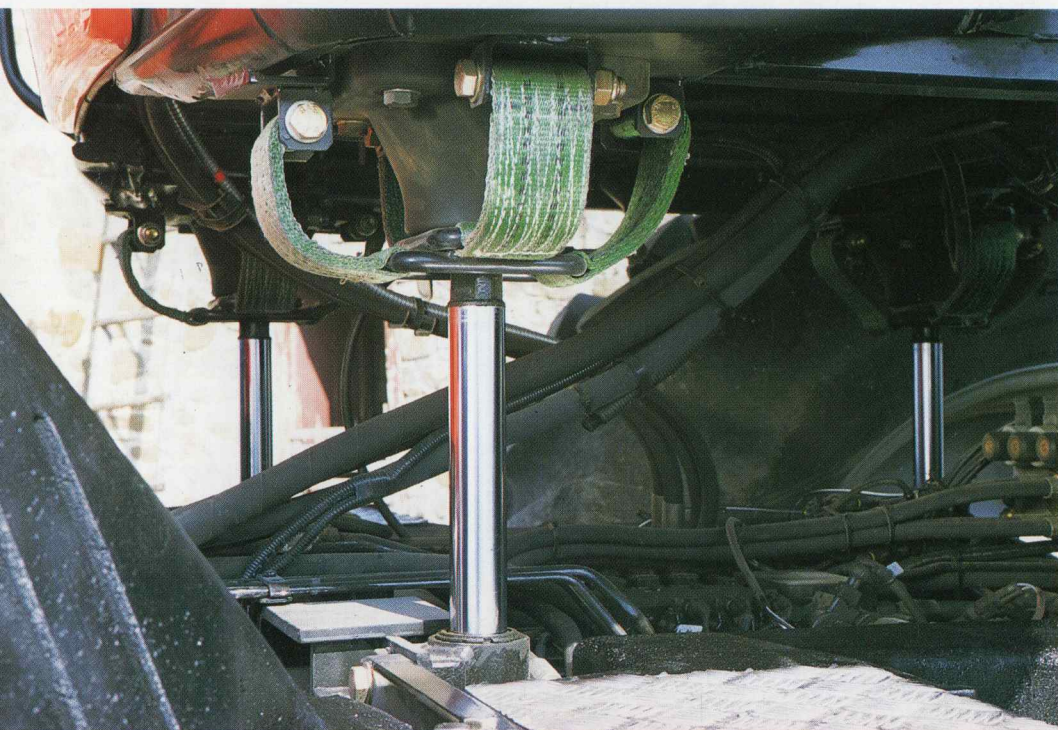
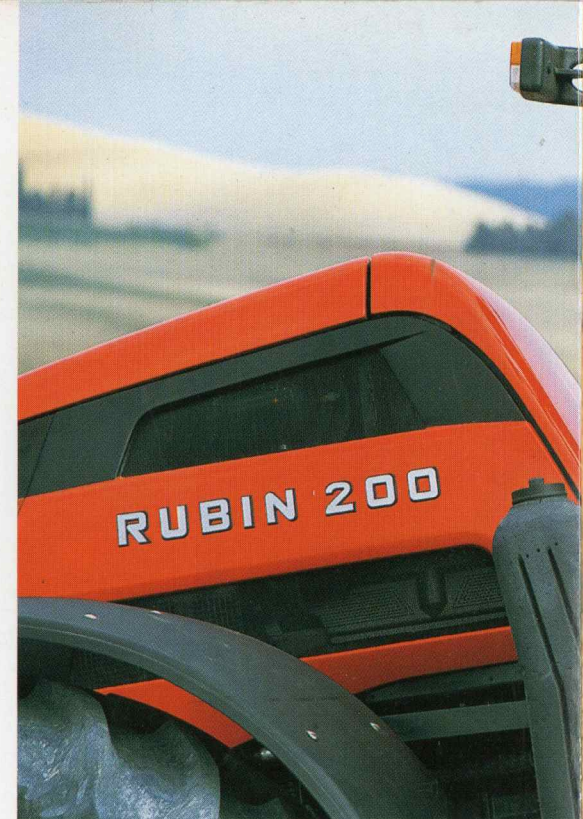
protected against accidental impact, dust and dirt. Whenever you need to gain access to the wiring, the ECUs or the tractor hydraulic system, you can raise the cab by way of the manual Up-Down control button. You can then work easily

and in maximum safety, as the cab can only be raised or lowered by holding the button depressed and movement speed is minimised, regulated by a position control system.



Pushbutton controls in the cab.

## LOW MAINTENANCE MEANS LESS DOWNTIME.



# TECHNOLOGY I

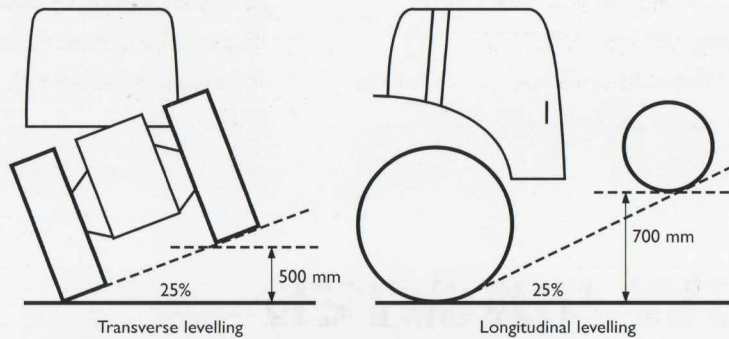
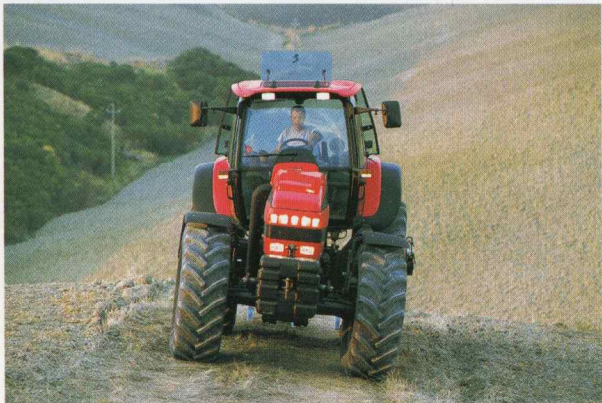
To activate automatic levelling, you simply press the ON/OFF button of the automatic control system. Alternatively, you can operate the system manually by means of a rocker switch. For maximum safety, the two systems are mutually exclusive, and manual control can only be operated at speeds of less than 3.6 km/h.

The automatic system also operates only

within certain speed and incline limits. When these limits are exceeded, the system gives an audible warning signal and the cab automatically returns to the normal attitude. When usual operating conditions are subsequently restored, the GALILEO Cab System resumes its compensation function without any intervention needed by the operator.

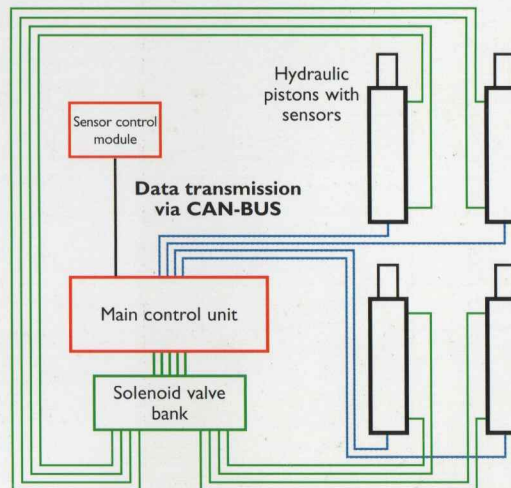


**N ACTION.**



**CONSTANT AND CONTINUOUS ADJUSTMENT TO THE TERRAIN.**

Control units and sensors



The brain of the GALILEO Cab System is electronic, and consists of a central electronic control unit that interacts with the dedicated sensor control module. Variations in slope are detected continuously by the sensors, and the output signals are relayed to four hydraulic double-acting pistons, which adjust the cab height with ultra fast response times. The electronic signals are sent through a "CAN-BUS" system, which is specifically designed to facilitate the interactions between the remote control units.



On the new RUBIN with the GALILEO Cab System, work becomes a real pleasure. The system completely eliminates all excessive tilting of the cab and the operator always enjoys optimum ergonomic conditions and visibility for driving the tractor and controlling implements. No need for any uncomfortable twisting or contortion, the ideal driving position can



## WORK IN TOTAL COMFORT.

be maintained at all times, and the reduced lateral oscillation also prevents bounce. Consequently, at the end of the working day, the operator feels fresh and relaxed with no fatigue or back ache. The system also allows the driver to give his full attention to the task in hand and consequently makes for increased productivity.



## NOT JUST SELF-LEVELLING.

Comfort, on a SAME tractor, is an all-embracing concept that addresses every aspect of the working environment. For example, the improved separation between the cab and engine compartment has

significantly improved the degree of noise and thermal insulation. The cab thus benefits from superior soundproofing, and the climate control system is also now more effective and energy efficient.



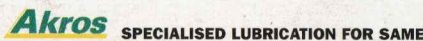
New air outlet vents.



# Technical Data

	RUBIN 160	RUBIN 180	RUBIN 200
GALILEO CAB SYSTEM			
<b>ENGINE</b>			
SAME	1000.6 W.T.I.	1000.6 W.T.I.	1000.6 W.T.I.
Cylinders/Displacement (no./cm³)	6/6000	6/6000	6/6000
VIS variable-length intake system	●	●	●
Supercharging	Turbo/Intercooler	Turbo/Intercooler	Turbo/Intercooler
Electronic governor	●	●	●
Rated power kW/HP/rpm	118/160/2350	132/180/2350	143/193/2350
Max. torque Nm	670	750	780
Max. torque engine speed rpm	1400-1700	1400-1700	1400-1700
Torque rise %	40	40	34
Oil cooler	●	●	●
Cooling system	Liquid/Oil	Liquid/Oil	Liquid/Oil
Air cleaner with dust ejector	●	●	●
Silencer with lateral exhaust	●	●	●
Fuel tank capacity l(gals)	470(103)	470(103)	470(103)
<b>TRANSMISSION</b>			
Main clutch - wet multiplate with electrohydraulic control	●	●	●
Diameter/no. of clutch plates mm(ins)/no.	168(6.6)/8	168(6.6)/8	168(6.6)/8
Electronic Power Shift: 18 sequential gears, electrohydraulic control	●	●	●
Creeper: 9 Power Shift gears no. FWD + REV	27 + 27	27 + 27	27 + 27
Electrohydraulic shuttle on all gears no. FWD + REV	18 + 18	18 + 18	18 + 18
<b>AUTOMATIC POWER SHIFT</b>			
Forced lubrication + oil cooler	●	●	●
P.T.O. clutch - wet multiplate with electrohydraulic control	●	●	●
Rear P.T.O. 540 - 1000 rpm	●	●	●
Rear P.T.O. 540 ECO - 1000 rpm	○	●	●
Front P.T.O. 1000 rpm (540/1000 opt.) with electrohydraulic engagement	○	○	○
<b>BRAKES AND STEERING</b>			
Integral hydrostatic braking on all 4 wheels	●	●	●
Front and rear wet disc brakes	●	●	●
Hydraulic trailer braking valve	○	○	○
Parking brake	Independent	Independent	Independent
Hydrostatic steering with reach and tilt adjustable steering wheel 55° steering angle	●	●	●
<b>FRONT AXLE</b>			
Hydraulic suspension of front axle	○	○	○
Electrohydraulic control of front-wheel drive and differential lock	●	●	●
SBA System: automatic control of front-wheel drive and differential locks	●	●	●
<b>HYDRAULIC LIFT</b>			
Electronic rear lift with RADAR	●	●	●
Max. lifting capacity with supplementary cylinders kg(lbs)	10 000(22046)	10 000(22046)	10 000(22046)
Hydraulic right lift rod and top link	○	○	○
Stabilisers with oscillation lock during lifting	●	●	●
Load sensing hydraulic system (std.): variable displacement pump l/min	113	113	113
Auxiliary service valves with 4 flow controls no. of ways	8	8	8
Coupling/uncoupling under pressure	●	●	●
Front lift with ballast, fold-up link arms and quick-action couplers	○	○	○

● = Standard ○ = Optional



	RUBIN 160	RUBIN 180	RUBIN 200								
GALILEO CAB SYSTEM											
Max. lifting capacity of front lift kg(lbs)	4000(8818)	4000(8818)	4000(8818)								
Electronic control of front lift	○	○	○								
<b>CAB</b>											
Cab with automatic levelling and "High Visibility" roof	●	●	●								
Anti-rollover safety system with audible warning signal	●	●	●								
Analogue/digital instrument panel and PERFORMANCE MONITOR	●	●	●								
SDS (Sequential Drive System)	●	●	●								
Heating and air conditioning	●	●	●								
Driver's seat with air suspension	●	●	●								
17 (tot.) work lights, 2 lateral work lights and rear screen wiper	●	●	●								
<b>TYRES</b>											
540/65 R 30 front	●	○	○								
480/70 R 34 front	○	○	○								
540/65 R 34 front	○	○	●								
480/70 R 30 front	○	○	○								
600/70 R 30 front	○	○	○								
600/70 R 38 rear	○	○	○								
Steering front fenders	●	●	●								
<b>DIMENSIONS AND WEIGHTS (with rear tyres)</b>	<b>650/65 R 38</b>	<b>580/70 R 42</b>	<b>580/70 R 42</b>								
Max. length without link arms mm(ins)	4861(191)	4861(191)	4861(191)								
Min./max. rear width mm(ins)	2426/2714(95/107)	2426/2714(95/107)	2426/2714(95/107)								
Min./max. front width mm(ins)	2389/2714(94/107)	2389/2714(94/107)	2389/2714(94/107)								
Max. height to top of cab mm(ins)	2980(117)	2980(117)	2980(117)								
Ground clearance mm(ins)	544(21.5)	594(23.5)	594(23.5)								
Wheelbase mm(ins)	2850(112)	2850(112)	2850(112)								
Front track width - min./max. mm(ins)	1866/2109(73.5/83)	1866/2109(73.5/83)	1866/2109(73.5/83)								
Rear track width - min./max. mm(ins)	1832/1999(72/79)	1832/1999(72/79)	1832/1999(72/79)								
Weight kg(lbs)	6800(14991)	7100(15653)	7100(15653)								
<b>SPEED RANGES</b>											
Speed in Km/h at 2350 rpm with 580/70 R 42 rear tyres						Speed in Km/h at 2350 rpm with 650/65 R 38 20.8 R 38 rear tyres					
18 FWD + 18 REV electronic control	FWD	REV	18 FWD + 18 REV electronic control	FWD	REV	18 FWD + 18 REV electronic control	FWD	REV	18 FWD + 18 REV electronic control	FWD	REV
1°	2,70	2,86	9°	11,67	12,38	1°	2,55	2,70	9°	11,02	11,69
2°	3,26	3,45	11°	12,32	13,06	2°	3,08	3,26	11°	11,64	12,34
3°	3,92	4,15	12°	14,82	15,72	3°	3,70	3,92	12°	14,00	14,85
4°	4,64	4,92	13°	17,56	18,62	4°	4,38	4,65	13°	16,59	17,59
5°	5,60	5,94	14°	21,19	22,48	5°	5,28	5,61	14°	20,00	21,23
6°	6,74	7,15	15°	25,49	27,03	6°	6,37	6,75	15°	24,96	25,5
7°	8,04	8,52	16°	30,39	32,24	7°	7,59	8,05	16°	29,74	30,45
8°	9,70	10,29	17°	36,68	38,90	8°	9,16	9,72	17°	34,45	36,75
10°	10,21	10,83	18°	40,00	40,00	10°	9,64	10,23	18°	40,00	40,00
Creeper	FWD	REV	Creeper	FWD	REV	Creeper	FWD	REV	Creeper	FWD	REV
1 SR	0,62	0,66	6 SR	1,55	1,64	1 SR	0,58	0,62	6 SR	1,46	1,55
2 SR	0,75	0,79	7 SR	1,85	1,96	2 SR	0,70	0,75	7 SR	1,74	1,85
3 SR	0,90	0,95	8 SR	2,23	2,36	3 SR	0,85	0,90	8 SR	2,10	2,23
4 SR	1,06	1,13	9 SR	2,68	2,84	4 SR	1,00	1,07	9 SR	2,53	2,69
5 SR	1,28	1,36				5 SR	1,21	1,29			

Headquarter and office: Viale F. Cassani, 15 - 24047 Treviglio (BG) Italy - Tel. (0363) 4211 - WEB Site: [www.same-tractors.com](http://www.same-tractors.com)

Technical data and illustrations are approximations only. SAME, in its effort to give the product that you require, reserves the right to update this information at any time without notice.

Sistema I.P. By the Marketing and Advertising Department - COD. 308.1187.3.1 - 11/2000