

SAKAI
MASTERS OF COMPACTION

SAKAI
100th
1918 - 2018

SV520

Series



SV520D

VIBRATORY SINGLE DRUM ROLLER

The innovatively designed SV520 is applicable to medium to large soil compaction jobs. The SV520 includes new roller features and optimizes job profitability through efficiency.

Proven Compactive Performance

- Roller compactive force reaches target density in less number of roller passes.
- Provides higher centrifugal force and amplitude.
- Achieves uniform compaction throughout lift thickness.

Low Operating Costs

- Sakai's new *Eco compaction mode (ECM)*, which reduces fuel consumption up to 20%, while maintaining compactive performance.
- Quality and durable components such as hydraulics, drum, center-pin hitch provide less maintenance.

Operator Comfort and Safety

- Includes Sakai's durable dual rubber isolation system between the drum and operator deck.
- Extremely quiet operator station with noise levels as low as 87 dB(A).



SV520T



SV520DF



SV520TF

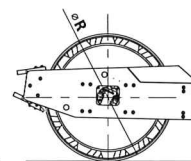
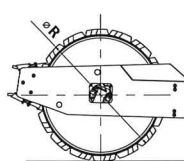
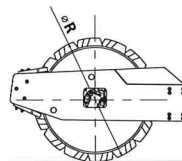
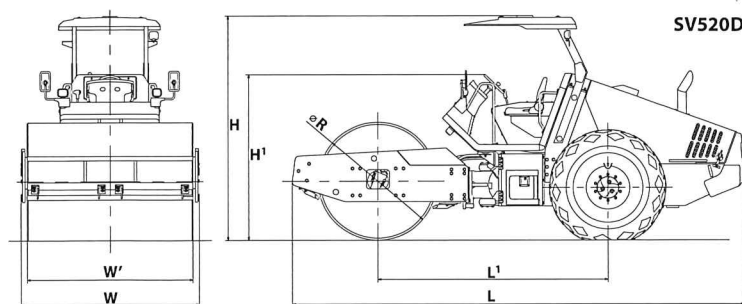
The photos may contain optional equipment and / or attachment.

**SERVICE
HOTLINE**

If you need any technical or service parts support on our products, please contact this web page.

www.sakainet.co.jp/english/

SV520 Series



TYPE			Vibratory Single Drum Roller				
MODEL			SV520D	SV520T	SV520DF	SV520TF	
CHASSIS MODEL			2SV31				
WEIGHTS	Max. operating weight with AWNING	kg (lbs)	10,450 (23,040)	10,790 (23,790)	12,090 (26,655)	13,060 (28,795)	
	Operating weight with AWNING	kg (lbs)	10,360 (22,840)	10,700 (23,590)	12,000 (26,460)	12,970 (28,595)	
	Load on front axle - operating weight with AWNING	kg (lbs)	5,440 (11,995)	5,820 (12,835)	7,140 (15,745)	8,090 (17,840)	
	Load on rear axle - operating weight with AWNING	kg (lbs)	4,920 (10,850)	4,880 (10,760)	4,860 (10,715)	4,880 (10,760)	
PERFORMANCE	Centrifugal force (L / H)	kN(lbs)[kgf]	172 / 255 (38,665 / 57,325) [17,540 / 26,000]				
	Frequency (L / H)	Hz (vpm)	33.3 / 28.3 (2,000 / 1,700)				
	Amplitude (L / H)	mm (in)	1.02 / 2.09 (0.040 / 0.082)	0.95 / 1.94 (0.037 / 0.076)	0.73 / 1.50 (0.029 / 0.059)	0.62 / 1.27 (0.024 / 0.050)	
	Dynamic linear pressure for front drum - operating weight with AWNING (L / H)	N / cm (lbs / in)	1,058 / 1,447 (600 / 825)	—		1,180 / 1,569 (670 / 895)	
	Number of speed shifts		2				
	Speed range (L / H)	km / h (mph)	0–6 / 0–10 (0–3.7 / 0–6.2)				
	Gradeability	% (°)	62 (32)		54 (28)	49 (26)	
	Turning radius compacted surface (inside / outside)	m (in)	3.5 (138) / 5.6 (221)				
	DIMENSIONS	Overall length L	mm (in)	5,840 (230)			
		Overall width W	mm (in)	2,295 (90)			
Overall height (without AWNING) H ¹		mm (in)	2,190 (86)	2,175 (86)	2,195 (86)	2,180 (86)	
Overall height (with AWNING) H		mm (in)	2,910 (115)	2,925 (115)	2,945 (116)	2,935 (116)	
Wheelbase L ¹		mm (in)	2,970 (117)				
Compaction width W ¹		mm (in)	2,130 (84)				
Drum width W ¹ / Drum diameter R		mm (in)	2,130 / 1,530 (84 / 60)	2,130 / 1,600 (84 / 63)	2,130 / 1,708 (84 / 67)	2,130 / 1,650 (84 / 65)	
Pad height		mm (in)	—	100 (4)	75 (3)	100 (4)	
Number of pads		pcs.	—	140	160	140	
Shell thickness		mm (in)	25 (1.0)	22 (0.9)	25 (1.0)	22 (0.9)	
Tire size x Number of tires			23.1 - 26 - 8 PR (OR) x 2				
Inflation (each wheels)		kPa (psi)	137 (19.9)				
Ground clearance		mm (in)	405 (16)		390 (15)	400 (16)	
Curb clearance		mm (in)	500 (20)	520 (20)	555 (22)	535 (21)	
Side clearance		mm (in)	82.5 (3)				
ENGINE		Make		ISUZU			
	Model		4BG1T (EPA Tier2 : equivalent)				
	Type		Diesel, water-cooled, 4-cycle, 4-cylinder inline, with turbo charger				
	Displacement	L (cu.in)	4.329 (264.2)				
	Rated output	kW (HP)/min ⁻¹	83.3 (112) / 2,100				
	Electric system battery	V (V / Ah x Qty)	24V (12V / 100 x 2)				
	Electric system alternator	V/A	24V / 50A				
DRIVE SYSTEM	Power transmission type		Hydrostatic				
	Drive wheel		All wheel (drum & tires)				
VIBRATION SYSTEM	Power transmission type		Hydraulic				
	Number of amplitude		2				
BRAKE SYSTEM	Vibrator type		Single eccentric shaft				
	Service brake		Dynamic braking through hydrostatic drive system / FNR lever				
	Secondary brake (Emergency brake)		Hydrostatic + Spring applied hydraulically released type (SAHR) / Brake pedal				
	Parking brake		SAHR / Panel button				
STEERING SYSTEM	Power transmission type		Hydraulic				
	Articulation / Oscillation angle	± (°)	37 / 9				
FLUID CAPACITY	Fuel tank	L (gal)	210 (55.5)				
	Hydraulic oil tank	L (gal)	50 (13.2)				

- Specified figures have a tolerance of ±5%.
- All specifications may be changed without notice.
- Specified figures are in SI Units, followed by their equivalent in English units of measurement in parentheses.
- Max. operating weight : Fuel=100%, Water=100%, Operator=75 kg
- Operating weight : Fuel=50%, water=50%, operator=75 kg
- The photos may contain optional equipment and/or attachment.

* Using low quality fuel may cause engine failure.



SAKAI HEAVY INDUSTRIES, LTD.

HEAD OFFICE: 1-4-8, SHIBA DAIMON, MINATO-KU, TOKYO JAPAN

TELEPHONE: +81-3-3431-9971

FACSIMILE: +81-3-3436-6212

2018.01C©