



FLORIDA SHERIFFS ASSOCIATION BID FSA18-EQU18.0
ITEM #340 COMPACTION VIBRATORY ROLLER

Base SV544 Compaction Vibratory Roller
Base machine meets all specifications

FSA20-EQU18.0

Compaction Vibratory Roller

30,000 LB Single Drum

1. WEIGHT: a. Minimum operating weight with open rops 15,200 lbs. 2. DRUM/VIBRATORY SYSTEM: a. Maximum compaction shall not be less than 30,000 lbs. b. Drum shall have a compaction width of not less than 66" c. Drum shall be smooth and not be less than 48" in diameter d. Vibratory system shall be hydraulically driven and have two amplitude settings e. Drum shall be equipped with an adjustable cleaning device f. Drum and vibratory pack shall be isolated from the machine during normal operation 3. ENGINE/CAB: a. Turbocharged diesel engine, minimum 74 HP Operator station shall be mounted to the frame with rubber mounts to further isolate the operation and controls from machine vibration during operation b. Gauges or warning indicators for fuel level, engine oil, hydraulic oil and coolant temperature with an alert sounding device activated whenever a warning indicator is illuminated. c. d. A backup alarm shall emit an audible alarm whenever the propel lever is moved into reverse 4. TRAVEL SYSTEM: a. A machine must be hydrostatic driven for the rear axle and the drum drive motor 5. ELECTRICAL SYSTEM: a. 12 or 24 volt electric system b. Maintenance free battery supplying 750 cold cranking amps c. Wiring harness protected with nylon-braided wrap

Specification	FSA	Sakai SV544
1a Weight	15,200	24,450
2a Compaction	30,000	32,820
2b Drum Width	66"	84"
2c Drum diameter	48"	60"
2d Amplitude	Dual	Dual
2e Cleaning device	Required	Yes – Scrapers
2f Isolators	Required	Yes – rubber mounts
3a Engine	74HP Turbo	130HP Turbo
3b Gauges	Required	Yes
3d Backup alarm	Required	Yes
4a Drive system	Hydrostatic Dual	Hydrostatic Dual
5a Elect. System	12V or 24V	24V
5b Battery	Maint. Free	Yes
5c Elect. Harness	Nylon wrap	Yes

The Sakai SV544 meets all technical specifications for this bid.

SAKAI®

SV544

Series

Soil Compactor



SV544D

Vibratory Single Drum Roller

The innovatively designed SV544 is applicable to medium to large soil compaction jobs.

Manual Traction Control

- High traction capability ensures compaction in both forward and reverse — even on jobs with soft ground, slopes or rough terrains.
- Manual traction control allows forward slope and reverse slope operation.

Manual Vehicle Speed Control

- Selective travel mode (2.5 - 6.2 mph)

Vibration System

- There are 2 range of vibration, high amplitude and low amplitude.
- Reaches target density in fewer roller passes.
- Achieves uniform compaction throughout lift thickness.

Long Lasting Drum Isolator System

- Sakai's unique drum mounting system extends the life of the drum isolators.
- Patented drum vibration isolation system and floating deck keep the operator free from vibration.
- Durable, high quality components such as hydraulics, drum and center-pin hitch assure longer life and lower maintenance costs.



SV544T



SV544TF

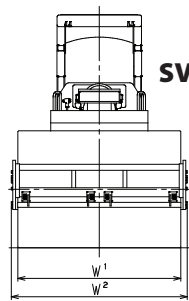


SV544TB

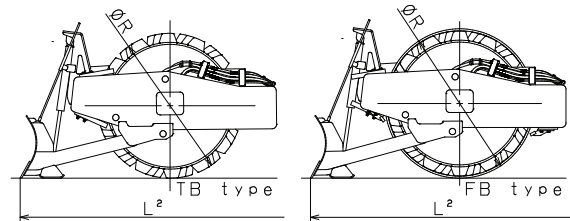
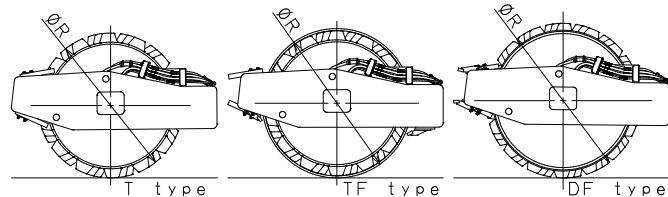
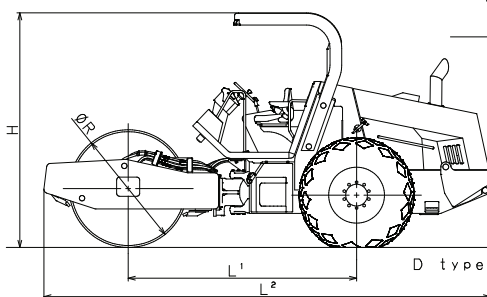
www.sakaiamerica.com

Options shown. Contact your dealer for details.

SV544 Series



SV544D



TYPE			Vibratory Single Drum Roller					
MODEL			SV544D	SV544T	SV544TB	SV544FB	SV544TF	SV544DF
CHASSIS MODEL			3SV56					
WEIGHTS	Max. operating weight with ROPS	kg(lbs)	11,090 (24,450)	11,470 (25,285)	12,230 (26,960)	14,500 (31,965)	13,740 (30,290)	12,770 (28,150)
	Operating weight with ROPS	kg(lbs)	11,000 (24,250)	11,380 (25,090)	12,140 (26,765)	14,410 (31,770)	13,650 (30,095)	12,680 (27,955)
	Load on front axle - operating weight with ROPS	kg(lbs)	5,790 (12,765)	6,175 (13,615)	7,270 (16,025)	9,555 (21,065)	8,460 (18,650)	7,545 (16,635)
	Load on rear axle - operating weight with ROPS	kg(lbs)	5,210 (11,485)	5,205 (11,475)	4,870 (10,735)	4,855 (10,705)	5,190 (11,440)	5,135 (11,320)
PERFORMANCE	Centrifugal force (L / H)	kN(lbs)/kgf	146 / 255 (32,820 / 57,325) [14,885 / 26,000]					
	Frequency (L / H)	Hz(vpm)	33.3 / 28.8 (2,000 / 1,730)					
	Amplitude (L / H)	mm(in)	0.85 / 2.01 (0.033 / 0.079)	0.80 / 1.88 (0.031 / 0.074)		0.52 / 1.23 (0.020 / 0.048)		0.62 / 1.45 (0.024 / 0.057)
	Dynamic linear pressure for front drum - operating weight with ROPS (L / H)	N/cm (lb/in)	952 / 1,464 (545 / 835)	-	-	1,125 / 1,637 (640 / 935)	1,075 / 1,587 (615 / 905)	-
	Number of speed shifts		3					
	Speed range (1 / 2 / 3)	km/h(mph)	0 - 4 / 0 - 6 / 0 - 10 (0 - 2.5 / 0 - 3.7 / 0 - 6.2)					
	Gradeability	%(°)	63 (32)					
	Turning radius compacted surface (inside / outside)	m(in)	3.4 / 5.5 (134 / 217)					
	Overall length L ²	mm(in)	5,805 (229)		6,365 (251)		5,805 (229)	
	Overall width W ²	mm(in)	2,300 (91)		2,500 (98)		2,300 (91)	
DIMENSIONS	Overall height (without ROPS)	mm(in)	2,455 (97)		2,525 (99)		2,515 (99)	
	Overall height (with ROPS) H	mm(in)	3,050 (120)		3,105 (122)		3,110 (122)	
	Wheelbase L ¹	mm(in)	2,970 (117)					
	Width with leveling blade	mm(in)	-		2,500 (98)		-	
	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 / 1,650 (84 / 65)	
	Pad height	mm(in)	-		100 (3.9)		81 (3.2)	
	Number of pads	pcs	-		140		160	
	Shell thickness	mm(in)	25 (1.0)		22 (0.9)		25 (1.0)	
	Tire size × Number of tires		23.1-26-8PR(OR)×2		23.1-26-10PR(OR) × 2			
	Inflation (each wheels)	kPa(psi)	137 (20.0)					
	Ground clearance	mm(in)	405 (15.9)		450 (17.7)		465 (18.3)	
	Curb clearance	mm(in)	500 (19.7)		530 (20.9)		560 (22)	
	Side clearance	mm(in)	85 (3.3)					
ENGINE	Make		CUMMINS					
	Model		QSF3.8					
	EPA emission standard		EPA-Tier4					
	Type		Diesel, water cooled, 4 cycle, 4 cylinder with turbo charger					
	Displacement	L(cu.in)	3,800 (229.0)					
	Rated output	kW(HP)/min ⁻¹	97.0 (130) / 2,200					
	Electric system battery	V(V/CCA×Qty)	24V (12V / 651 × 2)					
	Electric system alternator	V/A	24V / 90A					
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					
STEERING SYSTEM	Parking brake		SAHR / Panel button					
	Power transmission type		Hydraulic					
FLUID	Articulation / Oscillation angle	±(°)	37 / 9					
	Fuel tank	L(gal)	215 (56.8)					
CAPACITY	Hydraulic oil tank	L(gal)	53 (14)					

- 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=75kg
- Operating weight : Fuel=50%, Water=50%, Operator=75kg
- The photos may contain optional equipment and/or attachment.
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