



SV521D
Smooth Drum

VIBRATORY SINGLE DRUM ROLLER

The SV521 series rollers are the seventh (7th) generation of SAKAI's reputable 10-ton class vibratory single drum rollers and are further refined for better use. They are widely applicable to medium and heavy soil compaction works and the most suitable drum type can be selected from four (4) drum variations.

Proven Vibratory Compaction Performance

- High amplitude (2.05 mm for SV521D)
- High centrifugal force (26 tons)
- High density and uniform compaction throughout the layer

Excellent Traction

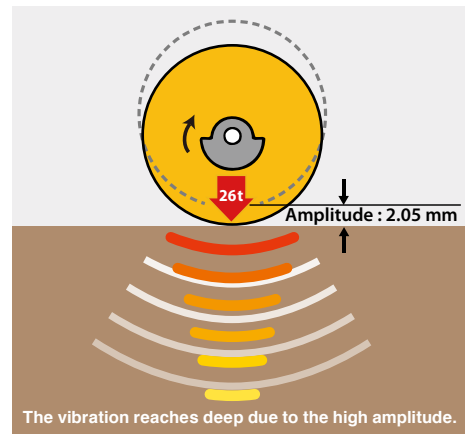
- All-wheel (drum and tires) drive system for all SV521 models (standard equipment)

Economical Operation & Low Maintenance Costs

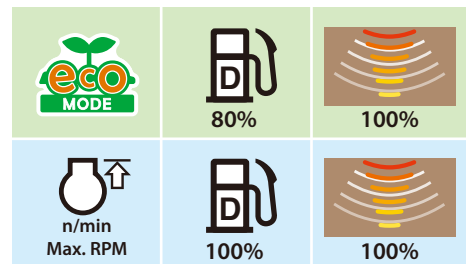
- Fuel saving ECO Compaction Mode as a standard equipment
- Durable and high quality components for prolonged service intervals as well as low maintenance costs

Operator Comfort & Safety

- Sakai's original shock absorbing system for better vibration isolation and longer parts life
- Increased safety by an emergency pedal brake in addition to the conventional service and parking brakes
- Complete vandalism protections devices



Powerful Vibration & High Amplitude



ECO Compaction Mode

Reasons for being

Durable Instrument Panel & Brake Pedal



Standard : AWNING Option : ROPS-Canopy, Enclosed Cabin Enclosed ROPS-Cabin



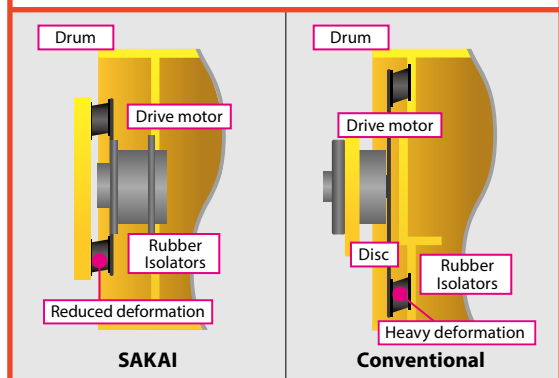
Powerful Compaction Force & High Amplitude

For SV521D

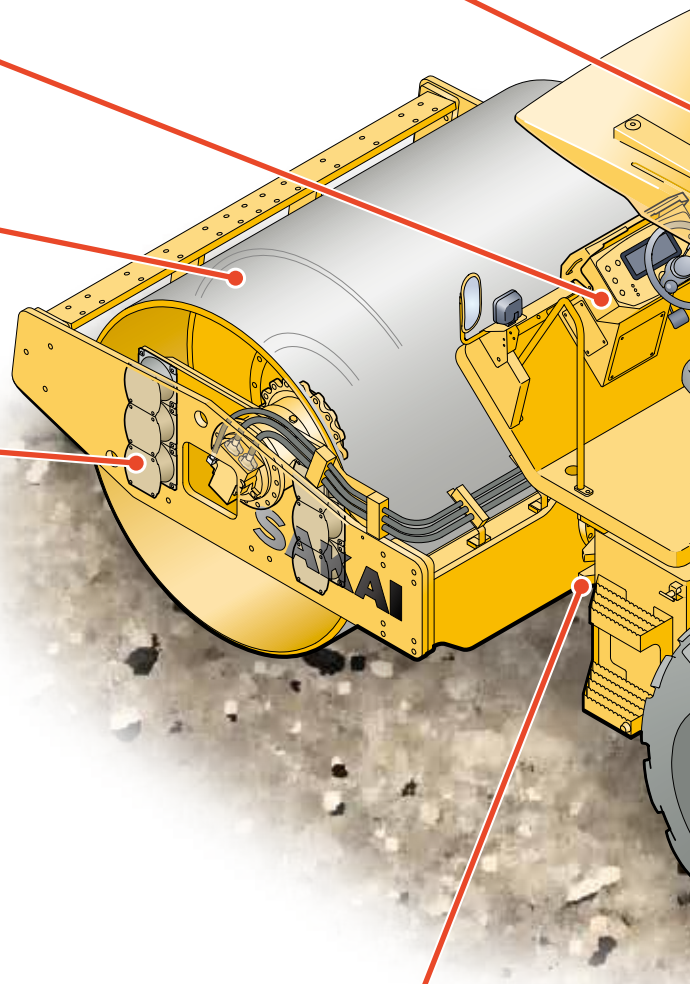
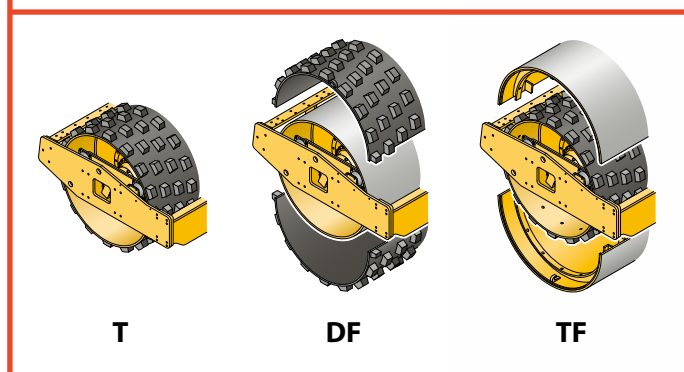
- Total applied force : 31.8 tons
- Centrifugal force : 26 tons
- High amplitude : 2.05 mm

*ECO Compaction Mode is standard.

Unique Shock Absorbing Design for better isolation and prolonged parts life (4-5 times longer)



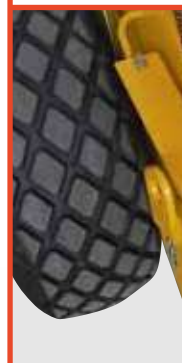
Drum Variations in addition to D type



Durable Center-pin Hitch Lube. cycle : 250 hrs



Tool Box in



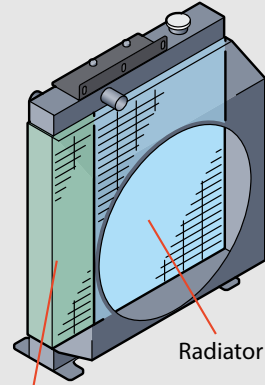
g No.1

Reinforced AWNING :

- Stays : Bending structure
- Roof : Rubber mounted



Side by Side Mounted Radiator & Hydraulic Oil Cooler, Access doors for cleaning and service



Hydraulic Oil Cooler

Radiator

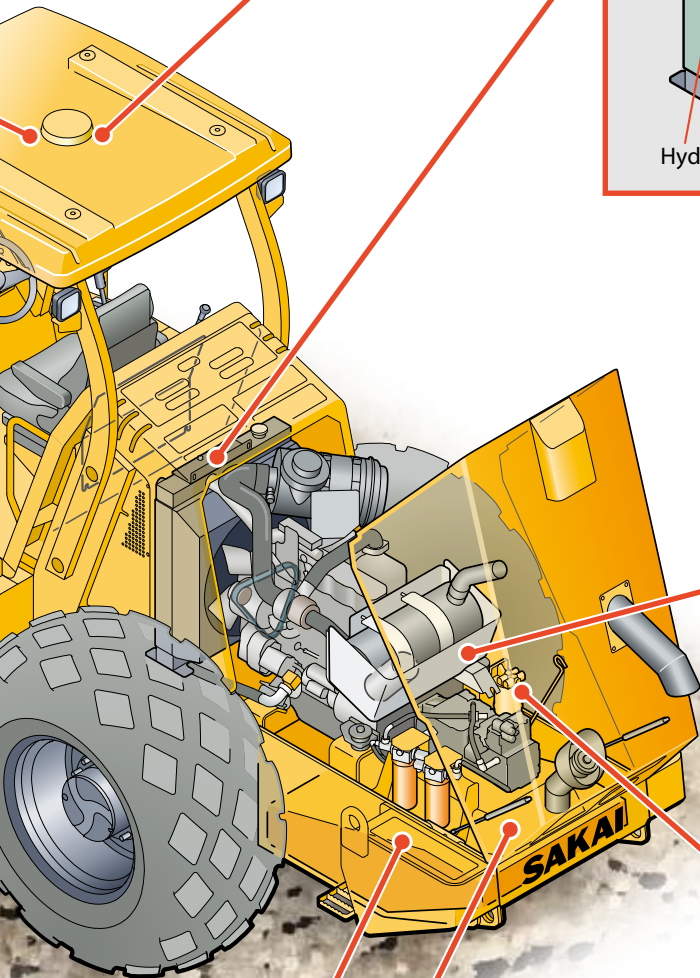
From the back of the seat



From the top



From each side



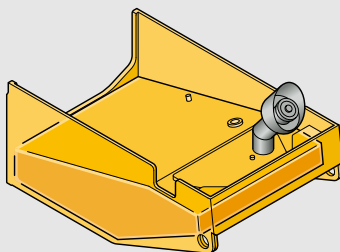
Muffler Cover to prevent burns



each side



Solid Fuel Tank

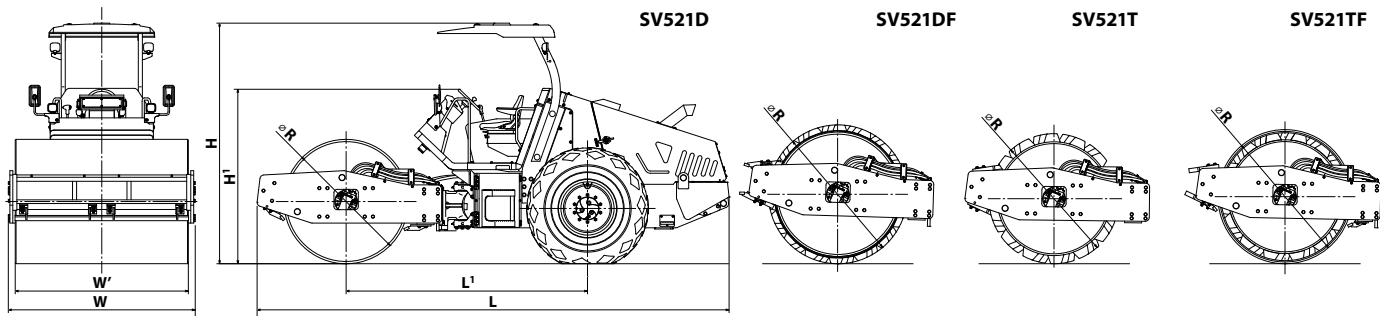


Large Size Sedimentor

- Water Deposit Capacity : 118 ml (Approx. 200% more capacity)



SV521 Series



TYPE		Vibratory Single Drum Roller				
MODEL		SV521D	SV521DF *1	SV521T	SV521TF*2	
DRUM TYPE		Smooth Drum	Combi. Drum	Padfoot Drum	Combi. Drum	
WEIGHTS	Max. operating weight with AWNING	kg (lbs.)	10,325 (22,765)	11,965 (26,380)	10,665 (23,515)	12,935 (28,520)
	Operating weight with AWNING	kg (lbs.)	10,235 (22,565)	11,875 (26,180)	10,575 (23,315)	12,845 (28,320)
	Load on front axle - operating weight with AWNING	kg (lbs.)	5,800 (12,790)	7,505 (16,550)	6,180 (13,625)	8,440 (18,610)
	Load on rear axle - operating weight with AWNING	kg (lbs.)	4,435 (9,780)	4,370 (9,635)	4,395 (9,690)	4,405 (9,715)
	Static Linear Pressure(drum) - operating weight with AWNING	kg/cm (lbs./in.)	27.2 (150)	-	-	39.6 (220)
PERFORMANCE	Centrifugal force (L / H)	kN (lbs.) [kgf]	150 (33,720) [15,300] / 255 (57,325) [26,000]			
	Frequency @ low amplitude/high amplitude	Hz (vpm)	33.3 (2,000) / 28.8 (1,730)			
	Amplitude (L / H)	mm (in)	0.87 (0.034) 2.05 (0.081)	0.62 (0.024) 1.47 (0.058)	0.81 (0.032) 1.90 (0.075)	0.53 (0.021) 1.25 (0.049)
	Number of speeds: Speed range (L / H)	km/h (mph)	2 speeds: 0-6 (0-3.7) / 0-10 (0-6.2)			
	Gradeability	% (°)	63% (32°)	56% (29°)	63% (32°)	49% (26°)
DIMENSIONS	Turning radius at compacted surface (inner / outer)	m (in)	3.4 (134) / 5.6 (221)			
	Overall length L	mm (in)	5,810 (229)			
	Overall width W	mm (in)	2,300 (91)			
	Overall height (without AWNING) H ¹	mm (in)	2,160 (85)	2,195 (86)	2,165 (85)	2,180 (86)
	Overall height (with AWNING) H	mm (in)	2,960 (117)	2,995 (118)	2,975 (117)	2,985 (118)
	Wheelbase L ¹	mm (in)	2,970 (117)			
	Compaction width W ¹	mm (in)	2,130 (84)			
	Drum width W ¹ x Drum diameter R	mm (in)	2,130 x 1,530 (84 x 60)	2,130 x 1,708 (84 x 67)	2,130 x 1,600 (84 x 63)	2,130 x 1,650 (84 x 65)
	Pad height	mm (in)	-	75 (3)	100 (4)	
	Number of pads	pcs.	-	160	140	
	Shell thickness	mm (in)	25 (1.0)		22 (0.9)	
	Tire size x Number of tires		23.1 - 26 - 8PR (OR) x 2			
	Ground clearance	mm (in)	400 (16)	370 (15)	390 (15)	380 (15)
Curb clearance	mm (in)	500 (20)	555 (22)	520 (20)	535 (21)	
Side clearance	mm (in)	85 (3)				
ENGINE	Make & Model	Isuzu "4BG1T" (EPA-Tier 2: equivalent)				
	Type	Water-cooled, 4-cycle, 4-cylinder, overhead valve, direct injection type diesel engine with turbocharger				
	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)	24 V (12 V / 80 Ah, 655 CCA x 2 pcs.)			
Electric system - alternator	V/A	24 V / 50 A				
DRIVE SYSTEM	Power transmission type	Hydrostatic transmission				
	Drive wheels	Drum and tires				
VIBRATION SYSTEM	Power transmission type	Hydrostatic transmission				
	Number of amplitudes	2				
BRAKE SYSTEM	Vibrator type	Single eccentric shaft type				
	Service brake (primary brake)	Hydrostatic, dynamic brake (FNR lever)				
STEERING SYSTEM	Parking brake (secondary brake)	Spring applied, hydraulically released type multi-disc brake (Brake button)				
	Emergency brake	Hydrostatic + Spring applied, hydraulically released type multi-disc brake (Brake pedal)				
STEERING SYSTEM	Type	Hydraulic type (articulated)				
	Articulation / Oscillation angle	± (°)	±37° / ±9°			
FLUID CAPACITY	Fuel tank	L (gal.)	215 (56.8)			
	Hydraulic oil tank	L (gal.)	50 (13.2)			

*1) Refer the specifications of D for DF without padfoot shells.
*2) Refer the specifications of T for TF without smooth shells.

● Specified figures have a tolerance of ±5%.
● All specifications may be changed without notice.
● Specified figures are in SI Units, followed by their equivalent English units of measurement in ().

● 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.

Standard Equipment :

- Instruments ● Gauges ● ECO MODE ● Scrapers for both directions
- Backup alarm ● Horn ● AWNING ● Comfort seat
- Front-facing working lights (2 pcs.) ● Rear-facing working lights (2 pcs.)
- Mirrors ● 4 points lifting ● Accessory socket (24 V) ● Safety steps
- Vandalism protection

Optional Equipment :

- Enclosed CABIN ● Enclosed ROPS-Cabin w/seat belt ● ROPS-Canopy w/seat belt
- Air conditioner ● Deluxe seat ● Turn signal lamp ● Combi. lamp
- Rotary beacon ● Pad locks for vandalism protection ● Filter kit for 1000hrs



ISO9001 certified Tokyo Head Office,
Tokyo Factory, Global Service Division,
Technical Development Division.



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