

# SAKAI®



# SW502S-1·354 TW504·354

Asphalt Roller

TW354



SW354

## VIBRATORY TANDEM ROLLER VIBRATORY COMBINED ROLLER

**All-drum drive, articulated steering compact size double drum type (SW) and combination type (TW) vibrating roller.**

### Eco Mode

- Sakai's new Eco compaction mode (ECM), which reduces fuel consumption up to 20%.

### Best Compaction Quality and Efficiency

- High-Low amplitude selector switch on the SW502S-1 and TW504 allows for use in wider applications.
- Excellent gradability.
- Vibration frequency of 4,000 vpm allows high-speed compaction with optimum impact spacing (SW/TW354).

### High Safety Standards

- Built in safety features prevent accidental starting, starts only when the Forward, Neutral & Reverse lever is in the neutral position and press down the parking brake switch.
- Emergency brake pedal is standard.
- 1 m x 1 m visibility.

### Easy Maintenance

- Sprinkler system with anti-clog package, i.e., a plastic water tank, triple-protection filtration, etc., and with perfect draining winterization.
- Oil bath lubrication for drum vibrator mechanism.

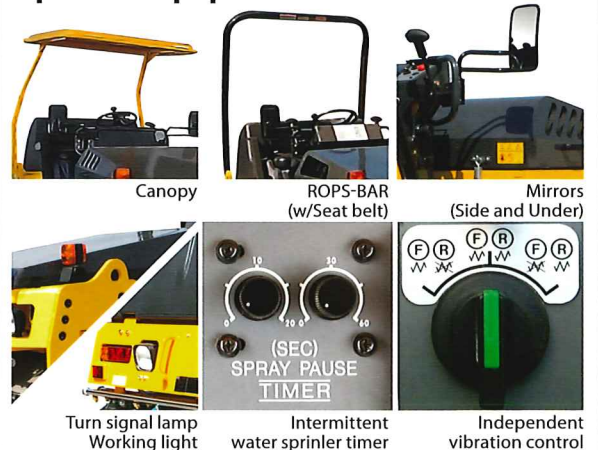


SW502S-1



TW504

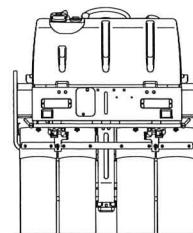
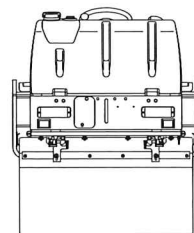
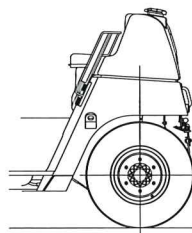
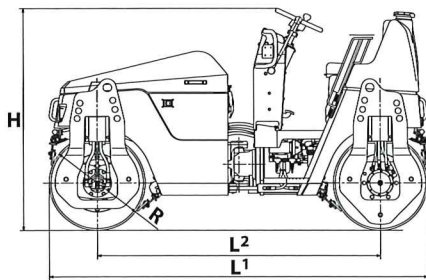
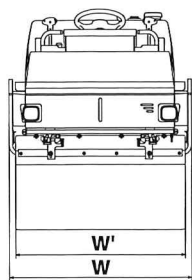
### Optional Equipment



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

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# SW502S-1·354/TW504·354



TW504·354

SW502S-1·354

TW504·354

| TYPE                                                      |                                            |                                      | Vibratory Tandem Roller                                                  |                         | Vibratory Combined Roller   |                         |
|-----------------------------------------------------------|--------------------------------------------|--------------------------------------|--------------------------------------------------------------------------|-------------------------|-----------------------------|-------------------------|
| MODEL                                                     |                                            |                                      | SW502S-1                                                                 | SW354                   | TW504                       | TW354                   |
| CHASSIS MODEL                                             |                                            |                                      | 1SW43                                                                    | 1SW73                   | 1TW74                       | 1TW73                   |
| WEIGHTS                                                   | Max. operating weight                      | kg (lb)                              | 4,170 (9,195)                                                            | 3,020 (6,660)           | 3,620 (7,980)               | 2,720 (5,995)           |
|                                                           | Operating weight                           | kg (lb)                              | 3,990 (8,795)                                                            | 2,900 (6,395)           | 3,440 (7,585)               | 2,600 (5,730)           |
|                                                           | Load on front axle (with operating weight) | kg (lb)                              | 1,990 (4,385)                                                            | 1,470 (3,240)           | 1,980 (4,365)               | 1,470 (3,240)           |
|                                                           | Load on rear axle (with operating weight)  | kg (lb)                              | 2,000 (4,410)                                                            | 1,430 (3,155)           | 1,460 (3,220)               | 1,130 (2,490)           |
| PERFORMANCE                                               | Centrifugal force (L / H)                  | kN (lb)                              | 26.5 / 34.3 (5,955 / 7,710)                                              | 29.0 (6,515)            | 26.5 / 34.3 (5,955 / 7,710) | 20.6 (4,630)            |
|                                                           | Frequency (L / H)                          | Hz (vpm)                             | 55 / 55 (3,300 / 3,300)                                                  | 67 (4,000)              | 52 / 52 (3,120 / 3,120)     | 52 (3,120)              |
|                                                           | Amplitude (L / H)                          | mm (in)                              | 0.27 / 0.35 (0.011 / 0.014)                                              | 0.31 (0.012)            | 0.30 / 0.40 (0.012 / 0.016) | 0.36 (0.014)            |
|                                                           | Dynamic linear pressure for front drum     | N / cm (lb / in)                     | 355 / 415 (204 / 239)                                                    | 363 (208)               | 354 / 414 (204 / 238)       | 292 (165)               |
|                                                           | Dynamic linear pressure for rear drum      | N / cm (lb / in)                     | 361 / 421 (208 / 243)                                                    | 361 (207)               | —                           | —                       |
|                                                           | No.of speeds                               |                                      | 2                                                                        |                         |                             |                         |
|                                                           | Speed range (Forward & Reverse) (L / H)    | km / h (mph)                         | 0–7.5 / 0–10 (0–4.7 / 0–6.2)                                             |                         | 0–7 / 0–10 (0–4.3 / 0–6.2)  |                         |
|                                                           | Gradeability                               | % (°)                                | 38 (21)                                                                  |                         |                             |                         |
|                                                           | Turning radius inside compacted surface    | m (in)                               | 3.0 (119)                                                                | 2.6 (103)               | 3.0 (119)                   | 2.6 (103)               |
|                                                           | DIMENSIONS                                 | Overall length <b>L</b> <sup>1</sup> | mm (in)                                                                  | 3,100 (122)             | 2,675 (105)                 | 3,105 (122)             |
| Overall width <b>W</b>                                    |                                            | mm (in)                              | 1,390 (55)                                                               | 1,290 (51)              | 1,390 (55)                  | 1,290 (51)              |
| Overall height <b>H</b>                                   |                                            | mm (in)                              | 1,705 (67)                                                               | 1,575 (62)              | 1,705 (67)                  | 1,575 (62)              |
| Wheelbase <b>L</b> <sup>2</sup>                           |                                            | mm (in)                              | 2,300 (91)                                                               | 2,000 (79)              | 2,300 (91)                  | 2,000 (79)              |
| Compaction width                                          |                                            | mm (in)                              | 1,300 (51)                                                               | 1,200 (47)              | 1,300 (51)                  | 1,200 (47)              |
| Drum diameter <b>R</b> / Drum width <b>W</b> <sup>1</sup> |                                            | mm (in)                              | 800 / 1,300 ( 31.5 / 51 )                                                | 675 / 1,200 (26.6 / 47) | 800 / 1,300 ( 31.5 / 51 )   | 675 / 1,200 (26.6 / 47) |
| Ground clearance                                          |                                            | mm (in)                              | 280 (11.0)                                                               | 250 (10.0)              | 280 (11.0)                  | 250 (10.0)              |
| Curb clearance                                            |                                            | mm (in)                              | 635 (25.0)                                                               | 540 (21.5)              | 635 (25.0)                  | 540 (21.5)              |
| Side clearance                                            |                                            | mm (in)                              | 45 (1.8)                                                                 |                         |                             |                         |
| ENGINE                                                    |                                            | Make                                 |                                                                          | KUBOTA                  |                             |                         |
|                                                           | Model                                      |                                      | V2203-M-ET04 ( Interim Tier4 )                                           |                         |                             |                         |
|                                                           | Type                                       |                                      | Diesel, Water-cooled, 4-cycle, 4-cylinder                                |                         |                             |                         |
|                                                           | Displacement                               | L ( cu.in )                          | 2.197 (134)                                                              | 1.647 (100)             |                             |                         |
|                                                           | Rated output                               | kW (HP) / min <sup>-1</sup>          | 29.1(39) / 2,300                                                         | 18.2 (24) / 2,200       |                             |                         |
|                                                           | Electric system battery                    | V (V / Ah × Qty)                     | 12 ( 12 / 72 x 1 )                                                       |                         |                             |                         |
|                                                           | Electric system alternator                 | V / A                                | 12 / 60                                                                  |                         |                             |                         |
| DRIVE SYSTEM                                              | Transmission type                          |                                      | Hydrostatic                                                              |                         |                             |                         |
|                                                           | Type                                       |                                      | Direct drive                                                             |                         |                             |                         |
|                                                           | Drive wheel                                |                                      | All wheel                                                                |                         |                             |                         |
| VIBRATION SYSTEM                                          | Power transmission type                    |                                      | Hydraulic                                                                |                         |                             |                         |
|                                                           | No. of amplitude                           |                                      | 2                                                                        | 1                       | 2                           | 1                       |
|                                                           | Vibrator type                              |                                      | Eccentric shaft                                                          |                         |                             |                         |
| BRAKE SYSTEM                                              | Service brake                              |                                      | Hydrostatic dynamic brake through drive system / FNR Lever               |                         |                             |                         |
|                                                           | Secondary brake (Emergency brake)          |                                      | Hydrostatic + Spring-applied hydraulically released (SAHR) / Brake pedal |                         |                             |                         |
|                                                           | Parking brake                              |                                      | SAHR / Panel button                                                      |                         |                             |                         |
| STEERING SYSTEM                                           | Type                                       |                                      | Hydraulic type (articulated)                                             |                         |                             |                         |
|                                                           | Steering / Oscillating angle (+/-)         | °                                    | 35 / 4.0                                                                 |                         |                             |                         |
| FLUID CAPACITY                                            | Fuel tank                                  | L (gal)                              | 50 (13)                                                                  | 40 (10.6)               | 50 (13)                     | 40 (10.6)               |
|                                                           | Hydraulic oil tank                         | L (gal)                              | 49 (12.9)                                                                | 43 (11.4)               | 43 (11.4)                   | 43 (11.4)               |
|                                                           | Sprinkler tank                             | L (gal)                              | 310 (82)                                                                 | 200 (53)                | 310 (82)                    | 200 (53)                |
|                                                           | Liquid tank                                | L (gal)                              | —                                                                        |                         | 10 (2.6)                    |                         |

● Operating weight : Fuel = 50%, Water = 50%, Operator = 75kg.      ● All units are SI units. Inside of ( ) is for reference units.  
 ● Max. operating weight : Fuel = 100%, Water = 100%, Operator = 75kg.      ● Above specified numbers could be deviated within ±5%.  
 ● Specifications are subject change without notice.

\* Using low quality fuel may cause engine failure.

## Standard Equipment:

- Instrument ● Gauges ● Scrapers for both directions ● Horn
- Sliding seat ● Head light ● Pressurized water sprinkler system
- 4 points lifting ● Accessory socket (12V)
- Release agent spray system (TW504, TW354)

## Optional Equipment:

- AWNING ● ROPS-BAR ● Backup alarm switch ● Working light
- Turn signal lamp ● Hazard lamp ● Mirrors ● Back up alarm
- Independent vibration control (SW502S-1, SW354)
- Intermittent water spray timer ● Floor mat ● Vandalism protections
- Chokes ● Antifreeze tank ● Drum edge light ● Super low-noise



SAKAI HEAVY INDUSTRIES, LTD. obtain the certification of quality management system ISO9001.

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