



Moving the World Forward

High performance seven ton compactor

The Ingersoll Rand SD-77 TF Series vibratory soil compactors with 66 inch vibratory drums offer many innovative features that provide excellent drum performance, serviceability, reliability, and a comfortable and safe environment for the operator. The SD-77DX smooth drum and SD-77F padfoot drum are engineered to efficiently and effectively compact all types of soils ranging from granular to cohesive.

Departing Weight (EECE) - Ib (kg) 16,350 (7415) 17,780 (8063) 17,780 (8063) 16,350 (7415) 17,780 (8063) 16,350 (7415) 17,780 (8063) 16,350 (7415) 17,780 (8063) 16,350 (7415) 17,780 (8063) 16,350 (7415) 17,850 (3560) 17,850 (3560) 16,103 (7303) 17,533 (7951) 17,533 (7951) 17,533 (7951) 17,533 (7951) 17,533 (7951) 17,533 (7951) 199 (5044) 199 (5044) 199 (5044) 199 (5044) 199 (5044) 199 (5044) 199 (5044) 199 (5044) 199 (5044) 199 (5044) 199 (5044) 199 (5044) 199 (5044) 199 (5044) 199 (5044) 199 (5045) 16,2955 16,2955 17,4850 16,2955 17,445 16,2955 17,445 17,445 18,204 17,445 18,204 1	MODEL	SD-77DX	SD-77F
Static Weight @ Drum — Ib (kg)	MACHINE WEIGHTS (W/ ROPS /		
Static Weight @ Tires - Ib (kg) 7,850 (3560) 7,850 (3560) Shipping Weight - Ib (kg) 16,103 (7303) 17,533 (7951)		16,350 (7415)	17,780 (8063)
Shipping Weight - Ib (kg)			
Length - in (mm) 199 (5044) 199 (5044) Width - in (mm) 74 (1880) 7	Static Weight @ Tires – lb (kg)	7,850 (3560)	7,850 (3560)
Length - in (mm)	Shipping Weight – lb (kg)	16,103 (7303)	17,533 (7951)
Width - in (mm)	MACHINE DIMENSIONS		
Height (top of ROPS / FOPS) - in (mm)	Length – in (mm)	199 (5044)	199 (5044)
Wheelbase - in (mm)	Width – in (mm)	74 (1880)	74 (1880)
Curb Clearance – in (mm) 15 (385) 17 (445) Inside Turning Radius (to drum edge) – in (mm) 128 (3249) 128 (3249) DRUM Width – in (mm) 66 (1676) 66 (1676) Diameter – in (mm) 48 (1219) 48 (1219) Shell Thickness – in (mm) 0.88 (22) 0.88 (22) Diameter Over Pad Feet – in (mm) N/A 54 (1372) Number Of Pad Feet N/A 84 Pad Height – in (mm) N/A 3 (76) Pad Tip Area – sq in (cm²) N/A 21 (125) VIBRATION Instructure Instructure Instructure Frequency – vpm (Hz) 1,850 – 2,025 (30.8 – 33.8) 1,870 – 2,025 (31.2 – 33.8) Centrifugal Force – lb (kN) High 32,100 (143) 38,500 (171) Low 23,300 (104) 30,300 (135) Nominal Amplitude – in (mm) High 0.078 (1.98) 0.078 (1.98) Low 0.047 (1.2) 0.052 (1.33) PROPULSION Type System Hydrostatic, 2-speed motor on planetary axle w/ No-Spin° differential and single-speed drum drive motor <td></td> <td>1) 115 (2922)</td> <td>116 (2955)</td>		1) 115 (2922)	116 (2955)
Inside Turning Radius (to drum edge) - in (mm) 128 (3249) 128 (3249)	Wheelbase – in (mm)	105 (2677)	105 (2677)
DRUM Width – in (mm) 66 (1676) 66 (1676) Diameter – in (mm) 48 (1219) 48 (1219) Shell Thickness – in (mm) 0.88 (22) 0.88 (22) Diameter Over Pad Feet – in (mm) N/A 54 (1372) Number Of Pad Feet – N/A 84 Pad Height – in (mm) N/A 3 (76) Pad Tip Area – sq in (cm²) N/A 21 (125) VIBRATION Frequency – vpm (Hz) 1,850 – 2,025 (30.8 – 33.8) 1,870 – 2,025 (31.2 – 33.8) Centrifugal Force – Ib (kN) High 32,100 (143) 38,500 (171) Centrifugal Force – Ib (kN) High 32,100 (143) 38,500 (171) Centrifugal Force – Ib (kN) High 32,100 (143) 38,500 (171) Low 23,300 (104) 30,300 (135) Nominal Amplitude – in (mm) High 0.078 (1.98) 0.078 (1.98) PROPULSION Type System Hydrostatic, 2-speed motor on planetary axle w/ No-5pin* differential and single-speed drum drive motor Drum Drive Planeta			
Width - in (mm)	Inside Turning Radius (to drum edge) -	in (mm) 128 (3249)	128 (3249)
Diameter - in (mm)	DRUM		
Shell Thickness - in (mm)	Width – in (mm)	66 (1676)	66 (1676)
Diameter Over Pad Feet - in (mm)	Diameter – in (mm)	48 (1219)	48 (1219)
Number Of Pad Feet N/A 84	Shell Thickness – in (mm)		
Pad Height – in (mm) N/A 3 (76) Pad Tip Area – sq in (cm²) N/A 21 (125) VIBRATION Prequency – vpm (Hz) 1,850 – 2,025 (30.8 – 33.8) 1,870 – 2,025 (31.2 – 33.8) Centrifugal Force – lb (kN) High 32,100 (143) 38,500 (171) Low 23,300 (104) 30,300 (135) Nominal Amplitude – in (mm) High 0.078 (1.98) 0.078 (1.98) PROPULSION Properture Properture Properture Type System Hydrostatic, 2-speed motor on planetary axle w/No-Spin® differential and single-speed drum drive motor Drum Drive Planetary gear reduction Tire Size 14.9 x 24 -6PR R3 14.9 x 24 -6PR R1 Travel Speed – mph (km/h) High 0 - 9 (0 - 14.5) 0 - 9.5 (0 - 15.3) Low 0 - 4.1 (0 - 6.6) 0 - 4.3 (0 - 6.9) ENGINE Turbocharged 4-cylinder Make & Model Cummins B4.5T Tier 2 Engine Type Turbocharged 4-cylinder Rated Power @ 2,200 rpm – hp (kW) 99 (73.8) 99 (73.8) Electrical System 12 volts DC, negative ground; 105 A alternator; 750 CCA ba	Diameter Over Pad Feet – in (mm)	N/A	54 (1372)
Pad Tip Área – sq in (cm²)	Number Of Pad Feet	N/A	84
VIBRATION Frequency – vpm (Hz) 1,850 – 2,025 (30.8 – 33.8) 1,870 – 2,025 (31.2 – 33.8) Centrifugal Force – lb (kN) High 32,100 (143) 38,500 (171) Low 23,300 (104) 30,300 (135) Nominal Amplitude – in (mm) High 0.078 (1.98) 0.078 (1.98) Low 0.047 (1.2) 0.052 (1.33) PROPULSION Type System Hydrostatic, 2-speed motor on planetary axle w/ No-Spin* differential and single-speed drum drive motor Drum Drive Planetary gear reduction Tire Size 14.9 x 24 -6PR R3 14.9 x 24 -6PR R1 Travel Speed – mph (km/h) High 0 - 9 (0 - 14.5) 0 - 9.5 (0 - 15.3) Low 0 - 4.1 (0 - 6.6) 0 - 4.3 (0 - 6.9) ENGINE Make & Model Cummins B4.5T Tier 2 Engine Type Turbocharged 4-cylinder Rated Power @ 2,200 rpm – hp (kW) 99 (73.8) 99 (73.8) Electrical System 12 volts DC, negative ground; 105 A alternator; 750 CCA battery <td< td=""><td></td><td></td><td></td></td<>			
Frequency - vpm (Hz)	Pad Tip Area – sq in (cm²)	N/A	21 (125)
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Centrifugal Force – Ib (kN) High Low 32,100 (143) 38,500 (171) Nominal Amplitude – in (mm) High Low 23,300 (104) 30,300 (135) Nominal Amplitude – in (mm) High D.078 (1.98) 0.078 (1.98) Low 0.047 (1.2) 0.052 (1.33) PROPULSION Type System Hydrostatic, 2-speed motor on planetary axle w/ No-Spin® differential and single-speed drum drive motor Drum Drive Planetary gear reduction Tire Size 14.9 x 24 -6PR R3 14.9 x 24 -6PR R1 Travel Speed – mph (km/h) High D. – 9 (0 – 14.5) 0 – 9.5 (0 – 15.3) Low 0 – 4.1 (0 – 6.6) 0 – 4.3 (0 – 6.9) ENGINE Make & Model Cummins B4.5T Tier 2 Engine Type Turbocharged 4-cylinder Rated Power @ 2,200 rpm – hp (kW) 99 (73.8) 99 (73.8) Electrical System 12 volts DC, negative ground; 105 A alternator; 750 CCA battery BRAKES Service Dynamic hydrostatic through propulsion system Parking / Secondary Spring-applied, hydraulically released on axle and drum drive motors MISCELLANEOUS + / - 38	Frequency – vpm (Hz)	1,850 – 2,025 (30.8 – 33.8)	1,870 – 2,025 (31.2 – 33.8)
Nominal Amplitude - in (mm)	Centrifugal Force – lb (kN) High	1 32,100 (143)	38,500 (171)
Down		23,300 (104)	30,300 (135)
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Type System Hydrostatic, 2-speed motor on planetary axle w/ No-Spin® differential and single-speed drum drive motor Planetary gear reduction Tire Size 14.9 x 24 -6PR R3 14.9 x 24 -6PR R1 Travel Speed - mph (km/h) High 0 - 9 (0 - 14.5) 0 - 9.5 (0 - 15.3) Low 0 - 4.1 (0 - 6.6) 0 - 4.3 (0 - 6.9) ENGINE Make & Model Cummins B4.5T Tier 2 Engine Type Rated Power @ 2,200 rpm - hp (kW) 99 (73.8) Flectrical System 12 volts DC, negative ground; 105 A alternator; 750 CCA battery BRAKES Service Dynamic hydrostatic through propulsion system Parking / Secondary Spring-applied, hydraulically released on axle and drum drive motors MISCELLANEOUS Articulation Angle + / - 38° 38° Oscillation Angle + / - 15° - + / - 15° Fuel Capacity - gal (L) 47 (178) Hydraulic Oil Capacity - gal (L) 22 (84)	Low	0.047 (1.2)	0.052 (1.33)
No-Spin® differential and single-speed drum drive motor Drum Drive Planetary gear reduction Tire Size 14.9 x 24 -6PR R3 14.9 x 24 -6PR R1 Travel Speed – mph (km/h) High 0 - 9 (0 - 14.5) 0 - 9.5 (0 - 15.3) Low 0 - 4.1 (0 - 6.6) 0 - 4.3 (0 - 6.9) ENGINE Make & Model Cummins B4.5T Tier 2 Engine Type Turbocharged 4-cylinder Rated Power @ 2,200 rpm – hp (kW) 99 (73.8) 99 (73.8) Electrical System 12 volts DC, negative ground; 105 A alternator; 750 CCA battery BRAKES Service Dynamic hydrostatic through propulsion system Parking / Secondary Spring-applied, hydraulically released on axle and drum drive motors MISCELLANEOUS Articulation Angle + / - 38° + / - 38° Oscillation Angle + / - 15° + / - 15° Fuel Capacity - gal (L) 47 (178) 47 (178) Hydraulic Oil Capacity - gal (L) 22 (84) 22 (84)	PROPULSION		
Drum Drive Planetary gear reduction Tire Size 14.9 x 24 -6PR R3 14.9 x 24 -6PR R1 Travel Speed − mph (km/h) High 0 − 9 (0 − 14.5) 0 − 9.5 (0 − 15.3) Low 0 − 4.1 (0 − 6.6) 0 − 4.3 (0 − 6.9) ENGINE Make & Model Cummins B4.5T Tier 2 Engine Type Turbocharged 4-cylinder Rated Power @ 2,200 rpm − hp (kW) 99 (73.8) 99 (73.8) Electrical System 12 volts DC, negative ground; 105 A alternator; 750 CCA battery BRAKES Service Dynamic hydrostatic through propulsion system Parking / Secondary Spring-applied, hydraulically released on axle and drum drive motors MISCELLANEOUS Articulation Angle + / - 38° + / - 38° Oscillation Angle + / - 15° + / - 15° Fuel Capacity - gal (L) 47 (178) 47 (178) Hydraulic Oil Capacity - gal (L) 22 (84) 22 (84)	Type System Hydrostatic, 2-speed motor on planetary axle w/		
Tire Size 14.9 x 24 -6PR R3 14.9 x 24 -6PR R1 Travel Speed - mph (km/h) High (Down of the property) 0 - 9 (0 - 14.5) 0 - 9.5 (0 - 15.3) Low 0 - 4.1 (0 - 6.6) 0 - 4.3 (0 - 6.9) ENGINE Make & Model Cummins B4.5T Tier 2 Engine Type Turbocharged 4-cylinder Rated Power @ 2,200 rpm - hp (kW) 99 (73.8) 99 (73.8) Electrical System 12 volts DC, negative ground; 105 A alternator; 750 CCA battery BRAKES Service Dynamic hydrostatic through propulsion system Parking / Secondary Spring-applied, hydraulically released on axle and drum drive motors MISCELLANEOUS Articulation Angle + / - 38° + / - 38° Oscillation Angle + / - 15° + / - 15° Fuel Capacity - gal (L) 47 (178) 47 (178) Hydraulic Oil Capacity - gal (L) 22 (84) 22 (84)			
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ENGINE Make & Model Engine Type Rated Power @ 2,200 rpm – hp (kW) BRAKES Service Parking / Secondary Parking / Secondary Spring-applied, hydraulically released on axle and drum drive motors MISCELLANEOUS Articulation Angle Articulation Angle + / - 38° Oscillation Angle + / - 15° Fuel Capacity – gal (L) Hydraulic Oil Capacity – gal (L) 22 (84)			
Make & Model Engine Type Rated Power @ 2,200 rpm – hp (kW) Electrical System 12 volts DC, negative ground; 105 A alternator; 750 CCA battery BRAKES Service Dynamic hydrostatic through propulsion system Parking / Secondary Spring-applied, hydraulically released on axle and drum drive motors MISCELLANEOUS Articulation Angle + / - 38° Oscillation Angle + / - 15° Fuel Capacity – gal (L) 47 (178) Hydraulic Oil Capacity – gal (L) 22 (84)	Low	0 – 4.1 (0 – 6.6)	0 – 4.3 (0 – 6.9)
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BRAKES Service Dynamic hydrostatic through propulsion system Parking / Secondary Spring-applied, hydraulically released on axle and drum drive motors MISCELLANEOUS Articulation Angle + / - 38° + / - 38° Oscillation Angle + / - 15° + / - 15° Fuel Capacity - gal (L) 47 (178) 47 (178) Hydraulic Oil Capacity - gal (L) 22 (84) 22 (84)		99 (73.8)	99 (73.8)
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Parking / Secondary Spring-applied, hydraulically released on axle and drum drive motors MISCELLANEOUS Articulation Angle + / - 38° + / - 38° Oscillation Angle + / - 15° + / - 15° Fuel Capacity – gal (L) 47 (178) 47 (178) Hydraulic Oil Capacity – gal (L) 22 (84)	BRAKES		
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MISCELLANEOUS Articulation Angle + / - 38° + / - 38° Oscillation Angle + / - 15° + / - 15° Fuel Capacity – gal (L) 47 (178) 47 (178) Hydraulic Oil Capacity – gal (L) 22 (84) 22 (84)	Parking / Secondary	Spring-applied, hydraulically released or	n axle and drum drive motors
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Fuel Capacity – gal (L) 47 (178) 47 (178) Hydraulic Oil Capacity – gal (L) 22 (84) 22 (84)		+ / - 15°	+ / - 15°
Hydraulic Oil Capacity – gal (L) 22 (84) 22 (84)			

Product improvement is a continuing goal at Ingersoll Rand. Designs and specifications are subject to change without notice or obligation.

AVAILABLE OPTIONS

- Air precleaner
- Battery master switch
- Engine cold start aid
- EROPS cab with heat (adds 450 lb / 204 kg)
- EROPS cab with heat and A/C (adds 550 lb / 249 kg)
- Gauges for engine oil pressure, hydraulic oil temperature, and volt meter
- Patented 2-piece clamp-on padfoot shell kit
- Power outlet
- Quick disconnect fittings
- Rotating beacon light
- Strike-off blade (padfoot drums only)
- Vpm meter and speedometer
- Work lights (two front and two rear) mounted on ROPS / FOPS



PERFORMANCE FEATURES

- Audible and visual warning light for engine oil pressure, coolant temperature, hydraulic oil temperature, and air cleaner restriction
- Centrally located remote-mounted hydraulic oil filters and hydraulic test ports
- Easily accessible battery protected behind hinged steps
- Gauges for coolant temperature, fuel, hour meter, and tachometer
- Heavy-duty axle with No-Spin® differential
- Hydraulic and eccentric oil level sight gauges
- Inside drum scraper bar
- Lockable control panel, engine cover, and fill caps
- ONE METER BY ONE METER visibility
- Powerful eccentric system with dual amplitude
- Premium 6-way adjustable suspension seat, including swivel feature and arm rest
- Premium shock mounts for operator platform
- Rear-mounted cooling system, easy access for cleaning
- ROPS / FOPS with seat belts
- Safety features include skid-resistant deck with foot rest, dual deck rails, hand rails, seat switch, back-up alarm, horn, and emergency stop
- Single control for direction and speed with on / off vibration switch
- Tilt steering column with console
- Tilting operator platform for easy access to major components, reducing downtime and repair costs
- Ultra-Grade® Traction Control System provides excellent climbing and traction when operating in difficult applications
- Universal front scraper, reducing time required to install or remove optional padfoot shell kit
- Variable frequencies provide better matching of natural resonance of various soils
- Vibration-isolated, anti-slip, roto-molded plastic operator platform reduces fatigue

