



Competitive Information Wheel Loaders

CONFIDENTIAL — For Internal Use Only

February 1984
UP17083

SPECIFICATIONS



W4



W11B



W14

Based on competitive information
known at time of printing

W4 and Competition (U.S.A.)

Manufacturer & Model	Case W4	Clark 2000	Raygo 625	Swinger 140	Swinger 220	Waldon 4000
Engine						
Manufacturer	Mitsubishi	Perkins	Ford (Gas) Ford (Diesel)	Perkins	Perkins	Perkins Continental
Model	4DQ50	4.154	172 G.F. 192	4.108	4.154	4-154 Diesel F-153 Gas
SAE Net hp @Gov rpm	37 @3000	54 @2600	53 @2400 53 @2400	37 @2800	48.5 @2800	47.1 @2200 47.6 @2200
Gross hp @Gov rpm	40 @3000	INA	INA	44 @3000	57 @2800	INA
Cubic Inch Displacement	128	154	172 192	107.4	154	154
Number of Cylinders	4	4	4 4	4	4	4
Electrical						
Voltage	12	12	12	12	12	12
Standard Alternator	43 amp	INA	INA	Sealed 30 amp	Sealed 30 amp	40 amp min.
Batteries	1-12 volt	1-12 volt	INA	1-12 volt	1-12 volt	1-12 volt
System Protection	Fuses	Fuses	INA	INA	INA	INA
Torque Converter						
Manufacturer	None	None	None	None	None	None
Type	None	None	None	None	None	None
Multiplication Ratio	None	None	None	None	None	None
Transmission						
Manufacturer	Sunstrand	Vikers	INA	Sunstrand	Sunstrand	Commercial
Type	Hydrostatic	Hydrostatic	Hydrostatic	Hydrostatic	Hydrostatic	Hydraulic
No. Speeds, Fwd./Rev.	2/2	2/2	3/3	1/1	1/1	3/3
Speeds - Fwd.	0-4.4 Work 0-12.7 Transport	0-2.5/0-10	3/6.5/19	0-7.3	0-10	0-8.0
Speeds - Rev.	0-4.4 Work 0-12.7 Transport	0-5	3/6.5/19	0-7.3	0-10	0-8.0
Automatic Power Shift	No	No	No	No	No	No
Modulation	No	No	No	No	No	No
Axles						
Manufacturer	Dana	Dana	INA	Dana	Dana	INA
Type of Axle	Full Float	Full Float	INA	Semi-Float	Semi-Float	Full Float
Differential Front	Conventional	Conventional	Limited Slip	Conventional	Limited Slip	Limited Slip
Differential Rear	Conventional	Limited Slip	Limited Slip	Conventional	Limited Slip	Limited Slip
Type of Brakes (Operating)	Hydrostatic	Hydrostatic	Hydrostatic	Hydrostatic	Hydrostatic	Disc
Parking Brake	Mechanical Disc	Mechanical Disc	Mechanical Disc	Mechanical Disc	Mechanical Disc	Hydraulic Disc
Standard Tires	12.5 SL x 155 GT*	10 x 16.5*	10 x 16.5*	27 x 8.50 - 15	10.0 x 16.5	8 x 16.5*
Largest Tires (Opt.)	None	31 x 15.5 - 15	12 x 16.5	26 x 12.0*	31 x 15.5 - 15*	10 x 16.5
Rear Axle or Frame Oscillation	16°	20°	22°	20°	20°	10°
Operating Information						
Bucket - ft. ³	13.5	18	16.9	12.0	18	14.8
Max. Hinge Pin Height	112.0"	122"	117"	110"	120"	111.375"
Reach @Max. Hgt. @45° Dump	27.1"	25.3"	2'4.75"	11"	23.5"	27.75"
Max. Dump Clear @45° Dump	91.4"	96"	96"	88.75"	105.75"	92"

INA - Information Not Available.

*Tires used to calculate operating information and dimensions.

**Equipped with optional rear ctw.

***Rear tires filled with CaCl₂.

△ Equipped with optional transmission.

□ Clark 35C government unit also offers the same G.M. engines available on the standard Clark 35C.

W4 and Competition (U.S.A.) cont.

Manufacturer & Model	Case W4	Clark 2000	Raygo 625	Swinger 140	Swinger 220	Waldon 4000
Operating Information Cont.						
Rollback @Ground Level	33°	35°	40°	37°	36°	INA
Reach @7' Hgt. - 45° Dump	27.0"	INA	INA	INA	INA	27.75"
Digging Depth (Bucket Horizontal)	4.8" @10°	.15"	1"	INA	INA	INA
Breakout Force	5,250 lbs.	INA	4,500 lbs.	4,576 lbs.	5,100 lbs.	5,950 lbs.
Tipping Load - Straight	3,430 lbs.	4,800 lbs.	INA	INA	INA	3,150 lbs.
Tipping Load - 35°	3,000 lbs.	—	3,600 lbs. @37°	INA	INA	INA
Tipping Load - 40°	—	4,000 lbs	—	2,814 lbs.** 2,814 lbs.***	4,010 lbs.**	INA
Tipping Load - 45°	—	—	—	—	—	2,800 lbs.
Hydraulic Lift Capacity @Ground	5,700 lbs.	INA	INA	INA	INA	4,600 lbs.
Hydraulic Lift Capacity @Full Hgt.	2,700 lbs.	INA	INA	INA	INA	3,000 lbs.
Turn Radius over Bucket	132"	INA	131"	109"	114"	104.5"
Approx. Operating Weight	4,730 lbs.	7,175 lbs.	6,100 lbs.	5,190 lbs.** 5,190 lbs.***	7,100 lbs.**	6,920 lbs.
Dimensions						
Machine Hgt. over ROPS	91.0"	93.2"	98.5"	83.5"	92"	76.625"
Tire Tread (Std. Tires)	46.5"	48"	47.5"	INA	INA	INA
Width over Tires	59"	59"	58"	48"	54"	48.25"
Ground Clearance	9.1"	INA	8"	8.25"	9.25"	INA
Overall Length-Bucket on Ground	144.5"	163.1"	167"	140.0"	155"	131.2"
Wheelbase	57.0"	58"	58.0"	52.0"	58.0"	52"
Steering System						
Type	Hydraulic	Hydraulic	Hydraulic Power	Hydraulic	Hydraulic	Hydraulic
Steering Pump Type	Gear	INA	Gear	Gear	Gear	Gear
Steering Cylinders	1 = 2.5" x 8.0"	INA	INA	1 = 2" x 10"	1 = 2.5" x 11.75"	INA
Pump Capacity	Combined w/Hyd. Pump	INA	INA	INA	INA	INA
Type Articulation	Center Pivot	INA	INA	Center Pivot	Center Pivot	Center Pivot
Loader Hydraulic System						
Type	Closed	Closed	INA	INA	INA	INA
Cylinders - Lift	2 = 2.5" x 29.6"	1 = ? x ?	INA	1 = 3" x 24"	1 = 3.5" x 25"	2 = 2.5" x 25.25"
Cylinders - Bucket	1 = 2.5" x 29.9"	1 = ? x ?	INA	1 = 2.5" x 17.5"	1 = 3" x 23"	1 = 4" x 8"
Pump Type	Gear	INA	INA	Gear	Gear	Gear
Pump Capacity	12 gpm	21.5 gpm	INA	9.1 gpm	15 gpm	14 gpm
Control Valve	2 Spool	2 Spool	INA	2 Spool	2 Spool	2 Spool
Raise Time	5.2 sec.	INA	5.5 sec.	INA	INA	4.8 sec.
Lower Time	3.02 sec.	INA	INA	INA	INA	3.4 sec.
Dump Time	1.54 sec.	INA	INA	INA	INA	1.8 sec.

W4 and Competition (Metric)

Manufacturer & Model	Case W4	Clark 2000	Raygo 625	Swinger 140	Swinger 220	Waldon 4000
Engine						
Manufacturer	Mitsubishi	Perkins	Ford (Gas) Ford (Diesel)	Perkins	Perkins	Perkins Continental
Model	4DQ50	4.154	172GF 192	4.108	4.154	4-154 F163
SAE Net hp @ Gov rpm	27.69 kW @3000	40.3 kW @2600	39.5 kW @2400	27.6 kW @2800	33.12 kW @2800	35.1 kW @2200 35.5 kW @2200
Gross hp @ Gov rpm	29.83 kW @3000	INA	INA	32.8 kW @3000	42.5 kW @2800	INA
Displacement	2084 cm ³	2520 cm ³	2819 cm ³ 3146 cm ³	1760 cm ³	2524 cm ³	2500 cm ³
Number of Cylinders	4	4	4 4	4	4	4
Electrical						
Voltage	12	12	12	12	12	12
Standard Alternator	43 amp	INA	INA	Sealed 30 amp	Sealed 30 amp	40 amp min.
Batteries	1-12 volt	1-12 volt	INA	1-12 volt	1-12 volt	1-12 volt
System Protection	Fused	Fuses	INA	INA	INA	INA
Torque Converter						
Manufacturer	None	None	None	None	None	None
Type	None	None	None	None	None	None
Multiplication Ratio	None	None	None	None	None	None
Transmission						
Manufacturer	Sunstrand	Vikers	INA	Sunstrand	Sunstrand	Vickers
Type	Hydrostatic	Hydrostatic	Hydrostatic	Hydrostatic	Hydrostatic	Hydrostatic
No. Speeds, Fwd./Rev.	2/2	2/2	3/3	1/1	1/1	3/3
Speeds - Fwd. (km/h)	7.0/20.4	0-4/0-16	4.83/10.46/30.57	0-11.7	0-16	0-12.87
Speeds - Rev. (km/h)	7.0/20.4	0-8	4.83/10.46/30.57	0-11.7	0-16	0-12.87
Automatic Shift	No	No	No	No	No	No
Modulation	No	No	No	No	No	No
Axles						
Manufacturer	Dana	Dana	INA	Dana	Dana	Dana
Type of Axle	Full Float	Full Float	INA	Semi-Float	Semi-Float	Full Float
Differential Front	Conventional	Conventional	Limited Slip	Conventional	Limited Slip	Limited Slip
Differential Rear	Conventional	Limited Slip	Limited Slip	Conventional	Limited Slip	Limited Slip
Type of Brakes (Operating)	Hydrostatic	Hydrostatic	Hydrostatic	Hydrostatic	Hydrostatic	Disc
Parking Brake	Mechanical Disc	Mechanical Disc	Mechanical Disc	Mechanical Disc	Mechanical Disc	Hydraulic Disc
Standard Tires	12.5L x 155GT*	10 x 16.5*	10 x 16.5*	27 x 8.50-15	10.00 x 16.5	8 x 16.5*
Largest Tires (Opt.)	None	31 x 15.50 - 15	12 x 16.5	26 x 12 - 12*	31 x 15.50 - 15*	10 x 16.5
Rear Axle Oscillation	16°	20°	22°	20°	20°	10°
Operating Information						
Bucket - m ³	.38 m ³	.51 m ³	.48 m ³	.34 m ³	.51 m ³	.42 m ³
Max. Hinge Pin Height	2844 mm	3100 mm	2972 mm	2794 mm	2920 mm	2828.92 mm
Reach @ Max. Hgt. @45° Dump	688 mm	645 mm	730 mm	279 mm	597 mm	704.85 mm
Max. Dump Clear @45° Dump	2321 mm	2440 mm	2438 mm	2254 mm	2686 mm	2336.8 mm

INA - Information Not Available.

*Tires used to calculate operating information and dimensions.

**Equipped with optional rear ctw.

***Rear tires filled with CaCl₂.

△ Equipped with optional transmission.

□ Clark 35C government unit also offers the same G.M. engines available on the standard Clark 35C.

W4 and Competition (Metric) cont.

Manufacturer & Model	Case W4	Clark 2000	Raygo 625	Swinger 140	Swinger 220	Waldon 4000
Operating Information Cont.						
Rollback @Ground Level	33°	35°	40°	37°	36°	INA
Reach @7' Hgt. - 45° Dump	INA	INA	INA	INA	INA	705 mm
Digging Depth (Bucket Horizontal)	122 mm @10°	4 mm	25.4 mm @10°	INA	INA	INA
Breakout Force	2381 kg	INA	2043 kg	2075 kg	2313.36 kg	2698.87 kg
Tipping Load - Straight	1555 kg	2180 kg	INA	INA	INA	1428.81 kg
Tipping Load - 35°	1361 kg	—	1634 kg @37°	INA	INA	INA
Tipping Load - 40°	—	1816 kg	—	1276 kg** 1276 kg***	1819 kg**	INA
Tipping Load - 45°	—	—	—	—	—	1270.05 kg
Hydraulic Lift Capacity @Ground	2585 kg	INA	INA	INA	INA	2086.52 kg
Hydraulic Lift Capacity @Full Hgt.	1224 kg	INA	INA	INA	INA	1360.77 kg
Turn Radius over Bucket	3353 mm	INA	3327 mm	2768 mm	2896 mm	2200.27 mm
Approx. Operating Weight	2068 kg	3253 kg	2769 kg	2354 kg** 2354 kg***	3225 kg**	3138.86 kg
Dimensions						
Machine Hgt. over ROPS	2311 mm	2370 mm	2502 mm	2121 mm	2337 mm	1946.27 mm
Tire Tread (Std. Tires)	1118.11 mm	1220 mm	1200 mm	1219 mm	INA	1225.55 mm
Width over Tires	1149.86 mm	1500 mm	1473 mm	INA	1372 mm	INA
Ground Clearance	231 mm	INA	203 mm	210 mm	235 mm	INA
Overall Length-Bucket on Ground	3670 mm	4145 mm	4242 mm	3556 mm	3937 mm	3332.16 mm
Wheelbase	1448 mm	1475 mm	1473 mm	1321 mm	1473 mm	1320.8 mm
Steering System						
Type	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Steering Pump - Type	Gear	INA	Gear	Gear	Gear	Gear
Steering Cylinders	1 = 63.5 × 633.2 mm	INA	INA	1 = 51 mm × 254 mm	1 = 64 × 298 mm	INA
Pump Capacity	Combined w/hyd. Pump	INA	INA	INA	INA	INA
Type Articulation	Center Pivot	INA	INA	Center Pivot	Center Pivot	Center Pivot
Loader Hydraulic System						
Type	Non Pressurized	Closed	INA	INA	INA	INA
Cylinders Lift	2 = 63.5 × 633.2 mm	1 = ? × ?	INA	1 = 76 × 584 mm	1 = 89 × 641 mm	2 = 63.5 × 641.35 mm
Cylinders Bucket	1 = 63.5 × 752 mm	1 = ? × ?	INA	1 = 64 × 445 mm	1 = 76 × 584 mm	1 = 101.6 203.2 mm
Pump Type	Gear	INA	INA	Gear	Gear	Gear
Pump Capacity	45 lit/min	81.4 lit/min	INA	34.4 lit/min	56.78 lit/min	53 lit/min
Control Valve	2 Spool	2 Spool	INA	2 Spool	2 Spool	2 Spool
Raise Time	5.2 sec.	INA	5.5 sec.	INA	INA	4.8 sec.
Lower Time	3.02 sec.	INA	INA	INA	INA	3.4 sec.
Dump Time	1.54 sec.	INA	INA	INA	INA	1.8 sec.

W11B and Competition (U.S.A.)

Manufacturer & Model	Case W11B	Allis-Chalmers 640	Cat 910	Fiat Allis FR7	General L-450	Namco SKL 701
Engine						
Manufacturer	Case	Perkins	Caterpillar	Fiat	Perkins	Deutz
Model	4-390	D4.203	3204	8045	4.154	F3L912
SAE Net hp @ Gov rpm	66 @2100	57 @2300	65 @2400	67 @2400	54 @3000	53.6 @2500
Gross hp @ Gov rpm	71 @2100	63 @2300	INA	71 @2400	60 @3000	INA
Cubic Inch Displacement	239	203	318	224	154	172
Number of Cylinders	4	4	4	4	4	3
Electrical						
Voltage	12	12	12	24	INA	12
Standard Alternator	42 amp	42 amp	40 amp	26 amp	INA	INA
Batteries	1-12 volt	1-12 volt	1-12 volt	2-12 volt	INA	1-12 volt
System Protection	Circuit Breakers	INA	Circuit Breakers	INA	INA	INA
Torque Converter						
Manufacturer	Funk	None	Caterpillar	Clark	None	None
Type	Single Stage	None	Single Stage	Single Stage	None	None
Multiplication Ratio	2.81:1	None	INA	2.6:1	None	None
Transmission						
Manufacturer	Funk	Cessna	Caterpillar	Clark	Sunstrand	INA
Type	Countershaft	Hydrostatic	Planetary	Countershaft	Hydrostatic	Hydrostatic
No. Speeds, Fwd./Rev.	3/3	2/2	3/1 or 3/3	3/3	Infinite	2/2
Speeds - Fwd.	3.6/9.2/22.3	0-5/5-11.2	4/7.2/14.8 or 4.3/8.2/14.6	3.5/7.2/20.4	0-13	0-6.2/0-12.4
Speeds - Rev.	3.6/9.2/22.3	0-5/5-11.2	6.6 or 4.6/8.7/15.5	3.5/7.2/20.4	0-13	0-6.2/0-12.4
Automatic Power Shift	No	No	No	No	No	No
Modulation	Yes	No	Yes	Yes	No	No
Axles						
Manufacturer	Rockwell	INA	Caterpillar	Fiat Allis	INA	INA
Type of Axle	Non Planetary	Outboard Planetary	Outboard Planetary	Outboard Planetary	Non Planetary	Non Planetary
Differential Front	Torque Prop	Full Power	Conventional	Conventional	Conventional	Full Power
Differential Rear	Torque Prop	Full Power	Conventional	Conventional	NoSpin	Full Power
Type of Brakes	Drum - Front Only	INA	Disc - Front Only	Disc	INA	Drum - Front Only
Brake Actuation	Hydraulic	Hydrostatic	Hydraulic	Hydraulic	Hydrostatic	Hydraulic
Standard Tires	12.5 x 20	12 x 16.5*	15.5 x 25*	14.00 x 24	15 x 19.5*	12.5 x 20*
Largest Tires (Opt.)	15 x 19.5*	31 x 15.5 - 15	—	15.5 x 25*	—	16/70 x 20
Rear Axle Oscillation	24°	22°	22°	26°	26°	24°
Operating Information						
Bucket - yd ³	1.0	0.75	1.25	1.3	1.0	1.1
Max. Hinge Pin Height	10'4"	10'3"	10'2"	11'2"	10'2"	9'4"
Reach @Max. Hgt. @45° Dump	3'	2'5.5"	2'11"	3'	2'5"	2'1"
Max. Dump Clear @45° Dump	8'6"	8'7"	8'	8'11"	8'4.5"	8'0.5"

INA - Information Not Available.

*Tires used to calculate operating information and dimensions.

**Equipped with optional rear ctw.

***Rear tires filled with CaCl₂.

△ Equipped with optional transmission.

□ Clark 35C government unit also offers the same G.M. engines available on the standard Clark 35C.

W11B and Competition (U.S.A.) cont.

Manufacturer & Model	Owatonna 780	Owatonna 880	Prime Mover LD-50	Swinger 320	Terex 11C/72-10	Volvo 4200
Engine						
Manufacturer	Perkins	Perkins	Ford/Deere/Deutz	John Deere	Hatz	Volvo
Model	4.236	4.248	172/164/172	J.D. 219	Z108	D39L
SAE Net hp @Gov rpm	70 @2250	INA	50 @2400	68 @2500	40 @3000	67 @2200
Gross hp @Gov rpm	INA	83 @2500	INA	70 @2500	43 @3000	70 @2200
Cubic Inch Displacement	236	248	172/164/172	219	123	236
Number of Cylinders	4	4	4/3/3	4	2	4
Electrical						
Voltage	12	12	12	12	12	24
Standard Alternator	INA	55 amp	35 amp	30 amp	30 amp	45 amp
Batteries	INA	2-6 volt	1-12 volt	1-12 volt	1-12 volt	2-12 volt
System Protection	INA	INA	INA	INA	INA	INA
Torque Converter						
Manufacturer	Clark	Clark	None	None	None	INA
Type	Single Stage	Single Stage	None	None	None	Single Stage
Multiplication Ratio	INA	2.91:1	None	None	None	2.6:1
Transmission						
Manufacturer	Clark	Clark	Sunstrand	Sunstrand	Linde	INA
Type	Countershaft	Countershaft	Hydrostatic	Hydrostatic	Hydrostatic/ Mechanical	Countershaft
No. Speeds, Fwd./Rev.	3/3	3/3	2/2	2/2	2/2	3/3
Speeds - Fwd.	INA	4/9/18	0-6.5/0-16	8/18	0-6/0-13	4.4/6.8/22.5
Speed - Rev.	INA	4/9/18	0-6.5/0-16	8/18	0-6/0-13	4.4/6.8/22.5
Automatic Power Shift	No	No	No	No	No	No
Modulation	Yes	Yes	No	No	No	Yes
Axles						
Manufacturer	Soma	Rockwell	Dana	INA	Mercedes	Soma
Type of Axle	Outboard Planetary	Outboard Planetary	Non Planetary	Non Planetary	Non Planetary	Outboard Planetary
Differential Front	INA	Torque Prop	Full Power	Full Power	INA	Conventional
Differential Rear	INA	Torque Prop	Full Power	Full Power	INA	Conventional
Type of Brakes	Drum - Front Only	Drum	INA	Integral with	Disc	Drum
Brake Actuation	Hydraulic	Hydraulic	INA	Hydraulic Drive	Hydraulic	Air/Hydraulic
Standard Tires	10.5 x 20	16.9 x 24*	10 x 16.5*	15 x 19.5*	12.5 x 18*	14.9 x 24
Largest Tires (Opt.)	15.00 x 19.5*	15.5 x 25	31 x 15.5 - 15	38 x 20	INA	15.5 x 25*
Rear Axle Oscillation	24°	22°	22°	20°	20° Frame Center Pivot	INA
Operating Information						
Bucket - yd³	1.0	1.125	0.75	1.0	0.75	1.0
Max. Hinge Pin Height	10'5"	11'1"	9'10"	11'6"	10'	11'9"
Reach @Max. Hgt. @45° Dump	3'1.5"	3'7"	2'6"	2'6"	2'4"	2'4"
Max. Dump Clear @45° Dump	8'3.5"	8'8"	8'	9'6"	8'1"	9'2"

W11B and Competition (U.S.A.) cont.

Manufacturer & Model	Waldon 6000		Waldon 8500	
Engine				
Manufacturer	Deutz Diesel Deutz Diesel	Perkins Diesel	Perkins	Deutz
Model	F3L912D F3L912W	4-203	6.3544	F5L912D
SAE Net hp @Gov rpm	52 @2200 46 @2200	57.5 @2200	107 INT @2250	83 INT @2250
Gross hp @Gov rpm	INA	INA	INA	INA
Cubic Inch Displacement	172/172	203	354	287
Number of Cylinders	3/3	4	6	5
Electrical				
Voltage	12	12	12	12
Standard Alternator	INA	INA	40 amp	40 amp
Batteries	INA	INA	1-12 volt	1-12 volt
System Protection	INA	INA	INA	INA
Torque Converter				
Manufacturer	None	None	None	None
Type	None	None	None	None
Multiplication Ratio	None	None	None	None
Transmission				
Manufacturer	Vickers	Vickers	Sunstrand	Sunstrand
Type	Hydraulic	Hydraulic	Hydrostatic	Hydrostatic
No. Speeds, Fwd./Rev.	3/3	3/3	3/3	3/3
Speeds - Fwd.	0-2.2/0-4.5/0-10	0-2.2/0-4.5/0-10	0-2.2/0-4.5/0-11	0-2.2/0-4.5/0-11
Speeds - Rev.	0-2.2/0-4.5/0-10	0-2.2/0-4.5/0-10	0-2.2/0-4.5/0-11	0-2.2/0-4.5/0-11
Automatic Power Shift	No	No	No	No
Modulation	No	No	No	No
Axles				
Manufacturer	Dana	Dana	Eaton	Eaton
Type of Axle	Non Planetary	Non Planetary	Non Planetary	Non Planetary
Differential Front	Full Power	Full Power	Conventional	Conventional
Differential Rear	Full Power	Full Power	Conventional	Conventional
Type of Brakes	Drum	Drum	Disc - Driveline	Disc - Driveline
Brake Actuation	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Standard Tires	12 x 16.5*	12 x 16.5*	15 x 19.5*	15 x 19.5*
Largest Tires (Opt.)	—	—	—	—
Rear Axle Oscillation	22°	22°	22°	22°
Operating Information				
Bucket - yd ³	0.75	0.75	1.25	1.25
Max. Hinge Pin Height	10'4"	10'4"	11'0.75"	11'0.75"
Reach @Max. Hgt. @45° Dump	INA	INA	INA	INA
Max. Dump Clear @45° Dump	8'11.375"	8'11.375"	9'3.12"	9'3.12"

INA - Information Not Available.

*Tires used to calculate operating information and dimensions.

**Equipped with optional rear ctw.

***Rear tires filled with CaCl₂.

△ Equipped with optional transmission.

□ Clark 35C government unit also offers the same G.M. engines available on the standard Clark 35C.

W11B and Competition (U.S.A.) cont.

Manufacturer & Model	Case W11B	Allis-Chalmers 640	Cat 910	Fiat Allis FR7	General L-450	Namco SKL701
Operating Information Cont.						
Rollback @Ground Level	36°	40°	40°	36°	45°	50° Carry Position
Reach @7' Hgt. - 45° Dump	4'3"	INA	3'8"	4'8"	INA	INA
Digging Depth (Bucket Horizontal)	2.5"	2"	3"	5"	INA	3.2"
Breakout Force	10,000	7,000	12,915	14,330	12,630	7,643
Tipping Load - Straight	8,318**	5,100	10,614 Δ	9,460**	7,010	INA
Tipping Load - 35°	7,426**	4,000	9,630 Δ	—	—	INA
Tipping Load - 40°	7,165**	—	—	8,510**	6,450	6,393
Tipping Load - 45°	—	—	—	—	—	—
Hydraulic Lift Capacity @Ground	10,880	INA	INA	INA	INA	8,318
Hydraulic Lift Capacity @Full Hgt.	8,466	INA	INA	INA	9,042	3,823
Turn Radius over Bucket	15'2.5"	14'2"	16'8"	16'9"	11'8"	13'11"
Approx. Operating Weight	11,236**	8,130	15,040 Δ	15,035**	8,500	10,362
Dimensions						
Machine Hgt. over ROPS	7'11"	7'11.9"	9'11"	9'6"	7'4"	8'2.4"
Tire Tread (Std. Tires)	60"	INA	65"	64"	54.5"	INA
Width over Tires	76"	56"	82"	79"	70.5"	75"
Ground Clearance	10.1"	12.4"	16"	14"	16.5"	18.5"
Overall Length-Bucket on Ground	17'4"	14'11"	19'	18'8"	15'3"	15'9"
Wheelbase	92"	65"	92"	93"	71"	81.5"
Steering System						
Type	Hydrostatic	Hydrostatic	Hydraulic Power	Hydraulic Power	INA	Hydraulic
Steering Pump Type	Gear	INA	Gear	Gear	INA	INA
Steering Cylinders	1 = 3" × 12.17"	INA	INA	2 = 2.6" × 11.9"	INA	INA
Pump Capacity	15 gpm @2100 rpm @2500 psi	9 gpm @2300 rpm @1500 psi	14 gpm @2400 rpm @2500 psi	Combined w/ Ldr. Pump	INA	10.6 gpm @2500 rpm @2030 psi
Type Articulation	Center Pivot	Center Pivot	Center Pivot	Center Pivot	INA	Center Pivot
Loader Hydraulic System						
Type	Pressurized	INA	Sealed	Sealed	INA	INA
Cylinders - Lift	2 = 3.5" × 28.5"	1 = 3.5" × 26.5"	2 = 4" × 23.88"	2 = 3.9" × 28.2"	2 = ? × ?	1 = ? × ?
Cylinders - Bucket	2 = 2.5" × 33.56"	1 = 3" × 28.1"	2 = 3" × 21.87"	2 = 3.9" × 15"	2 = ? × ?	1 = ? × ?
Pump Type	Gear	Gear	Gear	Gear	INA	INA
Pump Capacity	26 gpm @2100 rpm @2500 psi	25 gpm @2300 rpm @2250 psi	22.1 gpm @2400 rpm @2500 psi	30.4 gpm @2400 rpm @1000 psi	INA	21 gpm @2500 rpm @2610 psi
Control Valve	2 Spool	2 Spool	2 Spool	3 Spool	2 Spool	3 Spool
Raise Time	5.2 sec.	5.0 sec.	6.0 sec.	5.4 sec.	3.0 sec.	4.2 sec.
Lower Time	5.3 sec.	2.0 sec.	3.5 sec.	1.3 sec.	2.5 sec.	3.3 sec.
Dump Time	1.9 sec.	2.0 sec.	1.3 sec.	3.0 sec.	2.25 sec.	INA

W11B and Competition (U.S.A.) cont.

Manufacturer & Model	Owatonna 780	Owatonna 880	Prime Mover LD50	Swinger 320	Terex 11C / 72-10	Volvo 4200
Operating Information Cont.						
Rollback @Ground Level	40°	42°	40°	33°	49° Carry Position	40°
Reach @7' Hgt. - 45° Dump	INA	INA	INA	INA	3'4"	4'4"
Digging Depth (Bucket Horizontal)	0"	INA	2"	INA	9" @10°	4"
Breakout Force	INA	12,000	5,600	8,514	8,050	11,354
Tipping Load - Straight	7,420	9,000***	4,000	INA	5,180	7,500
Tipping Load - 35°	—	—	3,400 @36°	—	4,410 @38°	6,834
Tipping Load - 40°	6,500	8,000***	—	6,025**	—	6,614
Tipping Load - 45°	—	—	—	—	—	6,400
Hydraulic Lift Capacity @Ground	INA	INA	INA	INA	INA	INA
Hydraulic Lift Capacity @Full Hgt.	INA	7,500	3,200	INA	5,864	INA
Turn Radius over Bucket	14'2"	15'6"	INA	10'9"	14'1"	15'3"
Approx. Operating Weight	12,900	15,000***	6,900	11,573**	8,530	12,600
Dimensions						
Machine Hgt. over ROPS	8'1"	9'7"	7'7"	9'3"	9'5"	9'
Tire Tread (Std. Tires)	INA	67"	INA	INA	54.4"	63"
Width over Tires	INA	84"	59"	78.75"	70"	78"
Ground Clearance	11"	16"	8"	10.7"	16.7"	15"
Overall Length-Bucket on Ground	16'2"	18'2.5"	14'	15'1.5"	16'1"	18'6"
Wheelbase	83"	82"	63"	72"	76.7"	107"
Steering System						
Type	Hydraulic	Hydraulic	Hydrostatic	Hydraulic	Hydraulic Power	INA
Steering Pump Type	INA	INA	Gear	INA	Gear	Gear
Steering Cylinders	INA	INA	INA	? = 3" x 17"	1 = 2.36" x 11.8"	INA
Pump Capacity	INA	12 gpm @2250 rpm @1600 psi	6 gpm @2400 rpm @1200 psi	INA	6.3 gpm @3000 rpm @2175 psi	13.3 gpm @2200 rpm @1420 psi
Type Articulation	INA	INA	Center Pivot	INA	Center Pivot	Center Pivot
Loader Hydraulic System						
Type	INA	INA	INA	INA	Sealed	Sealed
Cylinders - Lift	INA	INA	2 = 3" x 21.25"	2 = 5" x 33.75"	2 = 2.95" x 20.1"	2 = 4" x 25.6"
Cylinders - Bucket	INA	INA	1 = 4" x 18.5"	1 = 3.5" x 39"	1 = 3.15" x 17.3"	2 = 3.1" x 26.2"
Pump Type	INA	Gear	Gear	INA	Gear	Gear
Pump Capacity	INA	28 gpm @2450 rpm @2250 psi	15 gpm @2400 rpm @2100 psi	29 gpm @2400 rpm @2200 psi	11 gpm @3000 rpm @2610 psi	28.3 gpm @2200 rpm @1420 psi
Control Valve	2 Spool	2 Spool	2 Spool	2 Spool	2 Spool	3 Spool
Raise Time	4.5 sec.	7.0 sec.	5.0 sec.	INA	6.5 sec.	5.2 sec.
Lower Time	3.5 sec.	5.0 sec.	3.5 sec.	INA	3.0 sec.	2.9 sec.
Dump Time	1.0 sec.	2.5 sec.	1.5 sec.	INA	1.8 sec.	1.0 sec.

INA - Information Not Available.

*Tires used to calculate operating information and dimensions.

**Equipped with optional rear ctw.

***Rear tires filled with CaCl₂.

△ Equipped with optional transmission.

□ Clark 35C government unit also offers the same G.M. engines available on the standard Clark 35C.

W11B and Competition (U.S.A.) cont.

Manufacturer & Model	Waldon 6000		Waldon 8500	
Operating Information Cont.				
Rollback @Ground Level	45°	45°	INA	INA
Reach @7' Hgt. - 45° Dump	INA	INA	INA	INA
Digging Depth (Bucket Horizontal)	1"	1"	4"	4"
Breakout Force	5,900	5,900	12,300	12,300
Tipping Load - Straight	4,700	4,700	8,400	8,400
Tipping Load - 35°	4,180 @37°	4,180 @37°	—	—
Tipping Load - 40°	—	—	—	—
Tipping Load - 45°	—	—	7,050	7,050
Hydraulic Lift Capacity @Ground	4,750	4,750	13,300 @Carry	13,300 @Carry
Hydraulic Lift Capacity @Full Hgt.	2,400	2,400	6,000	6,000
Turn Radius over Bucket	9'6.5"	9'6.5"	INA	INA
Approx. Operating Weight	8,800	9,140	14,000	12,890
Dimensions				
Machine Hgt. Over ROPS	7'6.5"	7'6.5"	7'9"	7'9"
Tire Tread (Std. Tires)	INA	INA	INA	INA
Width over Tires	59.75"	59.75"	70"	70"
Ground Clearance	INA	INA	INA	INA
Overall Length-Bucket on Ground	12'9.75"	12'9.75"	14'10"	14'10"
Wheelbase	56.81"	56.81"	66"	66"
Steering System				
Type	Hydraulic Power	Hydraulic Power	Hydraulic Power	Hydraulic Power
Steering Pump Type	INA	INA	INA	INA
Steering Cylinders	? = 3" x 8"	? = 3" x 8"	? = 3" x 8"	? = 3" x 8"
Pump Capacity	Combined w/ Ldr. Pump	Combined w/ Ldr. Pump	Combined w/ Ldr. Pump	Combined w/ Ldr. Pump
Type Articulation	Center Pivot	Center Pivot	INA	INA
Loader Hydraulic System				
Type	Closed	Closed	INA	INA
Cylinders - Lift	2 = 3" x 26"	2 = 3" x 26"	2 = 4" x 26"	2 = 4" x 26"
Cylinders - Bucket	1 = 5" x 8"	1 = 5" x 8"	1 = 5" x 10"	1 = 5" x 10"
Pump Type	Vane	Vane	INA	INA
Pump Capacity	31 gpm @2200 rpm @1800 psi	31 gpm @2200 rpm @1800 psi	32 gpm @2250 rpm @2500 psi	32 gpm @2250 rpm @2500 psi
Control Valve	2 Spool	2 Spool	INA	INA
Raise Time	5.3 sec.	5.3 sec.	INA	INA
Lower Time	3.5 sec.	3.5 sec.	INA	INA
Dump Time	INA	INA	INA	INA

W11B and Competition (Metric)

Manufacturer & Model	Case W11B	Allis-Chalmers 640	Cat 910	Fiat Allis FR7	General L-450	Namco SKL 701
Engine						
Manufacturer	Case	Perkins	Caterpillar	Fiat Allis	Perkins	Deutz
Model	4-390	D4.203	3204	8045	4.154	F3L912
SAE Net hp @Gov rpm	49 kW @2100	42.5 kW @2300	48 kW @2400	50 kW @2400	40.3 kW @3000	40 kW @2500
Gross hp @Gov rpm	53 kW @2100	46.9 kW @2300	INA	52 kW @2400	44.7 kW @3000	INA
Displacement	3920 cm ³	3376 cm ³	5211 cm ³	3670 cm ³	2524 cm ³	2819 cm ³
Number of Cylinders	4	4	4	4	4	3
Electrical						
Voltage	12	12	12	24	INA	12
Standard Alternator	42 amp	42 amp	40 amp	26 amp	INA	INA
Batteries	1-12 volt	1-12 volt	1-12 volt	2-12 volt	INA	1-12 volt
System Protection	Circuit Breakers	INA	Circuit Breakers	INA	INA	INA
Torque Converter						
Manufacturer	Funk	None	Caterpillar	Clark	None	None
Type	Single Stage	None	Single Stage	Single Stage	None	None
Multiplication Ratio	2.81:1	None	INA	2.6:1	None	None
Transmission						
Manufacturer	Funk	Cessna	Caterpillar	Clark	Sunstrand	INA
Type	Countershaft	Hydrostatic	Planetary	Countershaft	Hydrostatic	Hydrostatic
No. Speeds, Fwd./Rev.	3/3	2/2	3/1 or 3/3	3/3	Infinite	2/2
Speeds - Fwd. (km/h)	5.8/14.8/35.9	0-8.1/8.1-18.3	6.5/11.7/23.9 or 6.9/13.2/23.5	5.6/11.6/32.8	0-20.9	0-10/0-20
Speeds - Rev. (km/h)	5.8/14.8/35.9	0-8.1/8.1-18.3	10.8 or 7.4/14/24.9	5.6/11.6/32.8	0-20.9	0-10/0-20
Automatic Shift	No	No	No	No	No	No
Modulation	Yes	No	Yes	Yes	No	No
Axles						
Manufacturer	Rockwell	INA	Caterpillar	First Allis	INA	INA
Type of Axle	Non Planetary	Outboard Planetary	Outboard Planetary	Outboard Planetary	Non Planetary	Non Planetary
Differential Front	Torque Prop	Full Power	Conventional	Conventional	Conventional	Full Power
Differential Rear	Torque Prop	Full Power	Conventional	Conventional	NoSpin	Full Power
Type of Brakes	Drum - Front Only	INA	Disc - Front Only	Disc	INA	Drum - Front Only
Brake Actuation	Hydraulic	Hydrostatic	Hydraulic	Hydraulic	Hydrostatic	Hydraulic
Standard Tires	12.5 × 20	12.00 × 16.5*	15.5 × 25*	14.00 × 24	15.00 × 19.5*	12.5 × 20*
Largest Tires (Opt.)	15.00 × 19.5*	31 × 15.5 - 15	—	15.5 × 25*	—	16/70 × 20
Rear Axle Oscillation	24°	22°	22°	26°	26°	24°
Operating Information						
Bucket - m ³	.76 m ³	.57 m ³	.96 m ³	1.0 m ³	.76 m ³	.80 m ³
Max. Hinge Pin Height	3150 mm	3073 mm	3086 mm	3405 mm	3099 mm	2850 mm
Reach @Max. Hgt. - 45° Dump	914 mm	775 mm	884 mm	925 mm	740 mm	625 mm
Max. Dump Clear @45° Dump	2591 mm	2591 mm	2440 mm	2725 mm	2550 mm	2450 mm
Rollback @Ground Level	36°	40°	40°	36°	45°	50° Carry Position
Reach @7' Hgt. - 45° Dump	1295 mm	INA	1130 mm	1435 mm	INA	INA
Digging Depth (Bucket Horizontal)	64 mm	51 mm	79 mm	130 mm	INA	80 mm
Breakout Force	4536 kg	3175 kg	5858 kg	6500 kg	5729 kg	3467 kg

INA - Information Not Available.

*Tires used to calculate operating information and dimensions.

**Equipped with optional rear ctw.

***Rear tires filled with CaCl₂.

△ Equipped with optional transmission.

□ Clark 35C government unit also offers the same G.M. engines available on the standard Clark 35C.

W11B and Competition (Metric) cont.

Manufacturer & Model	Owatonna 780	Owatonna 880	Prime Mover LD-50	Swinger 320	Terex 11C / 72-10	Volvo 4200
Engine						
Manufacturer	Perkins	Perkins	Ford/Deere/Deutz	John Deere	Hatz	Volvo
Model	4.236	4.248	172/164/172	J.D. 219	Z108	D39L
SAE Net hp @Gov rpm	52.2 kW @2250	INA	37.3 kW @2400	50.7 kW @2500	30 kW @3000	49 kW @2200
Gross hp @Gov rpm	INA	61.9 kW @2500	INA	52.2 kW @2500	32 kW @3000	51.5 kW @2200
Displacement	3867 cm ³	4064 cm ³	2800/2700 2800 cm ³	3589 cm ³	2000 cm ³	3860 cm ³
Number of Cylinders	4	4	4/3/3	4	2	4
Electrical						
Voltage	12	12	12	12	12	24
Standard Alternator	INA	55 amp	35 amp	30 amp	30 amp	45 amp
Batteries	INA	2-6 volt	1-12 volt	1-12 volt	1-12 volt	2-12 volt
System Protection	INA	INA	INA	INA	INA	INA
Torque Converter						
Manufacturer	Clark	Clark	None	None	None	INA
Type	Single Stage	Single Stage	None	None	None	Single Stage
Multiplication Ratio	INA	2.91:1	None	None	None	2.6:1
Transmission						
Manufacturer	Clark	Clark	Sunstrand	Sunstrand	Linde	INA
Type	Countershaft	Countershaft	Hydrostatic	Hydrostatic	Hydrostatic/ Mechanical	Countershaft
No. Speeds, Fwd./Rev.	3/3	3/3	2/2	2/2	2/2	3/3
Speeds - Fwd. (km/h)	INA	6.4/14.5/29.0	0-10.5/0-25.7	12.8/29	0-9.6/0-21	7/11/36
Speeds - Rev. (km/h)	INA	6.4/14.5/29.0	0-10.5/0-25.7	12.8/29	0-9.6/0-21	7/11/36
Automatic Shift	No	No	No	No	No	No
Modulation	Yes	Yes	No	No	No	Yes
Axles						
Manufacturer	Soma	Rockwell	Dana	INA	Mercedes	Soma
Type of Axle	Outboard Planetary	Outboard Planetary	Non Planetary	Non Planetary	Non Planetary	Outboard Planetary
Differential Front	INA	Torque Prop	Full Power	Full Power	INA	Conventional
Differential Rear	INA	Torque Prop	Full Power	Full Power	INA	Conventional
Type of Brakes	Drum - Front Only	Drum	INA	Integral with Hydraulic	Disc	Drum
Brake Actuation	Hydraulic	Hydraulic	INA	Drive	Hydraulic	Air/Hydraulic
Standard Tires	10.5 x 20	16.9 x 24*	10 x 16.5*	15 x 19.5*	12.5 x 18*	14.9 x 24
Largest Tires (Opt.)	15.00 x 19.5*	15.5 x 25	31 x 15.5 -15	38 x 20	INA	15.5 x 25
Rear Axle Oscillation	24°	22°	22°	20°	20° Frame Center Pivot	INA
Operating Information						
Bucket - m ³	.76 m ³	.86 m ³	.57 m ³	.76 m ³	.57 m ³	.80 m ³
Max. Hinge Pin Height	3175 mm	3378 mm	2997 mm	3504 mm	3050 mm	3570 mm
Reach @Max. Hgt. - 45° Dump	952 mm	1092 mm	711 mm	762 mm	720 mm	720 mm
Max. Dump Clear @45° Dump	2527 mm	2642 mm	2438 mm	2896 mm	2470 mm	2800 mm
Rollback @Ground Level	40°	42°	40°	33°	49° Carry Position	40°
Reach @7' Hgt. - 45° Dump	INA	INA	INA	INA	1010 mm	1320 mm
Digging Depth (Bucket Horizontal)	0 mm	INA	51 mm	INA	229 mm @10°	100 mm
Breakout Force	INA	5443 kg	2540 kg	3862 kg	3650 kg	5150 kg

W11B and Competition (Metric) cont.

Manufacturer & Model	Waldon 6000		Waldon 8500	
Engine				
Manufacturer	Deutz-Diesel	Perkins Diesel	Perkins	Deutz
Model	F 3L912D F3L912W	4-203	6.3544	F5L912D
SAE Net hp @Gov rpm	38.8 kW @2200 34.3 kW @2200	42.8 kW @2200	79.8 kW @2250	61.9 kW @2250
Gross hp @Gov rpm	INA	INA	INA	INA
Displacement	2819 cm ³ 2819 cm ³	3327 cm ³	5800 cm ³	4710 cm ³
Number of Cylinders	$\frac{3}{3}$	4	6	5
Electrical				
Voltage	12	12	12	12
Standard Alternator	INA	INA	40 amp	40 amp
Batteries	INA	INA	1-12 volt	1-12 volt
System Protection	INA	INA	INA	INA
Torque Converter				
Manufacturer	None	None	None	None
Type	None	None	None	None
Multiplication Ratio	None	None	None	None
Transmission				
Manufacturer	Vickers	Vickers	Sunstrand	Sunstrand
Type	Hydraulic	Hydraulic	Hydrostatic	Hydrostatic
No. Speeds, Fwd./Rev.	3/3	3/3	3/3	3/3
Speeds - Fwd. (km/h)	0-3.5/0-7.2/0-16.1	0-3.5/0-7.2/0-16.1	0-3.5/0-7.2/0-17.7	0-3.5/0-7.2/17.7
Speeds - Rev. (km/h)	0-3.5/0-7.2/0-16.1	0-3.5/0-7.2/0-16.1	0-3.5/0-7.2/0-17.7	0-3.5/0-7.2/17.7
Automatic Shift	No	No	No	No
Modulation	No	No	No	No
Axles				
Manufacturer	Dana	Dana	Eaton	Eaton
Type of Axle	Non Planetary	Non Planetary	Non Planetary	Non Planetary
Differential Front	Full Power	Full Power	Conventional	Conventional
Differential Rear	Full Power	Full Power	Conventional	Conventional
Type of Brakes	Drum	Drum	Disc - Driveline	Disc - Driveline
Brake Actuation	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Standard Tires	12 x 16.5*	12 x 16.5*	15 x 19.5*	15 x 19.5*
Largest Tires (Opt.)	—	—	—	—
Rear Axle Oscillation	22°	22°	22°	22°
Operating Information				
Bucket m ³	.57 m ³	.57 m ³	.96 m ³	.96 m ³
Max. Hinge Pin Height	3150 mm	3150 mm	3372 mm	3372 mm
Reach @Max. Hgt. - 45° Dump	INA	INA	INA	INA
Max. Dump Clear @45° Dump	2727 mm	2727 mm	2823 mm	2823 mm
Rollback @Ground Level	45°	45°	INA	INA
Reach @7' Hgt. - 45° Dump	INA	INA	INA	INA
Digging Depth (Bucket Horizontal)	25.4 mm	25.4 mm	102 mm	102 mm
Breakout Force	2676 kg	2676 kg	5579 kg	5579 kg

INA - Information Not Available.

*Tires used to calculate operating information and dimensions.

**Equipped with optional rear ctw.

***Rear tires filled with CaCl₂.

△ Equipped with optional transmission.

□ Clark 35C government unit also offers the same G.M. engines available on the standard Clark 35C.

W11B and Competition (Metric) cont.

Manufacturer & Model	Case W11B	Allis-Chalmers 640	Cat 910	Fiat Allis FR7	General L-450	Namco SKL 701
Operating Information Cont.						
Tipping Load - Straight	3773 kg**	2313 kg	4814 kg Δ	4290 kg**	3180 kg	INA
Tipping Load - 35°	3368 kg**	1814 kg	4504 kg Δ	—	—	INA
Tipping Load - 40°	3250 kg**	—	—	3860 kg**	2926 kg	2900 kg
Tipping Load - 45°	—	—	—	—	—	—
Hydraulic Lift Capacity @Ground	4935 kg	INA	INA	INA	INA	3773 kg
Hydraulic Lift Capacity @Full Hgt.	3840 kg	INA	INA	INA	4101 kg	1734 kg
Turn Radius over Bucket	4636 mm	4318 mm	5070 mm	5100 mm	3556 mm	4250 mm
Approx. Operating Weight	5097 kg**	3687 kg	6822 kg Δ	6820 kg**	3856 kg	4700 kg
Dimensions						
Machine Hgt. over ROPS	2413 mm	2436 mm	3020 mm	2900 mm	2240 mm	2500 mm
Tire Tread (Std. Tires)	1524 mm	INA	1650 mm	1620 mm	1384 mm	INA
Width over Tires	1930 mm	1422 mm	2030 mm	2000 mm	1780 mm	1900 mm
Ground Clearance	254 mm	315 mm	381 mm	350 mm	420 mm	470 mm
Overall Length-Bucket on Ground	5283 mm	3772 mm	5796 mm	5680 mm	4648 mm	4800 mm
Wheelbase	2337 mm	1651 mm	2337 mm	2350 mm	1800 mm	2070 mm
Steering System						
Type	Hydrostatic	Hydrostatic	Hydraulic	Hydraulic Power	INA	Hydraulic
Steering Pump - Type	Gear	INA	Gear	Gear	INA	INA
Steering Cylinders	1 = 76 × 309 mm	INA	INA	2 = 65 × 302 mm	INA	INA
Pump Capacity	56.8 lit/min @2100 rpm @17.2 kPa	34.1 lit/min @2300 rpm @10.3 kPa	53 lit/min @2400 rpm @17.2 kPa	Combined w/ Ldr. Pump	INA	40 lit/min @2500 rpm @14.0 kPa
Type Articulation	Center Pivot	Center Pivot	Center Pivot	Center Pivot	INA	Center Pivot
Loader Hydraulic System						
Type	Pressurized	INA	Sealed	Sealed	INA	INA
Cylinders - Lift	2 = 89 × 724 mm	1 = 88.9 × 673.1 mm	2 = 102 × 606 mm	2 = 100 × 717 mm	2 = ? × ? mm	1 = ? × ? mm
Cylinders - Bucket	2 = 63.5 × 852 mm	1 = 76.2 × 713.9 mm	2 = 76 × 555 mm	2 = 100 × 380 mm	2 = ? × ? mm	1 = ? × ? mm
Pump Type	Gear	Gear	Gear	Gear	INA	INA
Pump Capacity	98.4 lit/min @2100 rpm @17.2 kPa	99.6 lit/min @2300 rpm @15.5 kPa	85 lit/min @2400 rpm @17.2 kPa	115 lit/min @2400 rpm @7.0 kPg	INA	80 lit/min @2500 rpm @18.0 kPa
Control Valve	2 Spool	2 Spool	2 Spool	3 Spool	2 Spool	3 Spool
Raise Time	5.2 sec.	5.0 sec.	6.0 sec.	5.4 sec.	3.0 sec.	4.2 sec.
Lower Time	5.3 sec.	2.0 sec.	3.5 sec.	1.3 sec.	2.5 sec.	3.3 sec.
Dump Time	1.9 sec.	2.0 sec.	1.3 sec.	3.0 sec.	2.25 sec.	INA

W11B and Competition (Metric) cont.

Manufacturer & Model	Owatonna 780	Owatonna 880	Prime Mover LD-50	Swinger 320	Terex 11C / 72-10	Volvo 4200
Operating Information Cont.						
Tipping Load - Straight	3365 kg	4082 kg***	1814 kg	INA	2350 kg	3400 kg
Tipping Load - 35°	—	—	1542 kg @36°	—	2000 kg @38°	3100 kg
Tipping Load - 40°	2948 kg	3629 kg***	—	2732 kg**	—	3000 kg
Tipping Load - 45°	—	—	—	—	—	2900 kg
Hydraulic Lift Capacity @Ground	INA	INA	INA	INA	INA	INA
Hydraulic Lift Capacity @Full Hgt.	INA	3402 kg	1452 kg	INA	2660 kg	INA
Turn Radius over Bucket	4318 mm	4724 mm	INA	3277	4300 mm	4650 mm
Approx. Operating Weight	5850 kg	6804 kg***	3130 kg	5260 kg**	3869 kg	5700 kg
Dimensions						
Machine Hgt. over ROPS	2464 mm	2921 mm	2413 mm	2819 mm	2870 mm	2750 mm
Tire Tread (Std. Tires)	INA	1702 mm	INA	INA	1380 mm	1600 mm
Width over Tires	INA	2134 mm	1473 mm	2000 mm	1780 mm	1980 mm
Ground Clearance	279 mm	406 mm	203 mm	272 mm	424 mm	380 mm
Overall Length-Bucket on Ground	4928 mm	5550 mm	4267 mm	4610 mm	4910 mm	5650 mm
Wheelbase	2108 mm	2083 mm	1575 mm	1829 mm	1950 mm	2725 mm
Steering System						
Type	Hydraulic	Hydraulic	Hydrostatic	Hydraulic	Hydraulic Power	INA
Steering Pump - Type	INA	INA	Gear	INA	Gear	Gear
Steering Cylinders	INA	INA	INA	? = 76 x 433 mm	1 = 60 x 300 mm	INA
Pump Capacity	INA	45.4 lit/min @2450 rpm @11.0 kPa	23 lit/min @2400 rpm @8.4 kPa	INA	24 lit/min @3000 rpm @15 kPa	48 lit/min @2200 rpm
Type Articulation	INA	INA	Center Pivot	INA	Center Pivot	Center Pivot
Loader Hydraulic System						
Type	INA	INA	INA	INA	Sealed	Sealed
Cylinders - Lift	INA	INA	2 = 76 x 540 mm	2 = 127 x 857 mm	2 = 75 x 510 mm	2 = 100 x 650 mm
Cylinders - Bucket	INA	INA	1 = 102 x 470 mm	1 = 89 x 991 mm	1 = 80 x 440 mm	2 = 80 x 665 mm
Pump Type	INA	Gear	Gear	INA	Gear	Gear
Pump Capacity	INA	105.9lit/min@2450 rpm @11.0 kPa	57 lit/min @2400 rpm @14.8 kPa	109.8lit/min@2400 rpm @15.1 kPa	42 lit/min @3000 rpm @18 kPa	103 lit/min @2200 rpm @10 kPa
Control Valve	2 Spool	2 Spool	2 Spool	2 Spool	2 Spool	3 Spool
Raise Time	4.5 sec.	7.0 sec.	5.0 sec.	INA	6.5 sec.	5.2 sec.
Lower Time	3.5 sec.	5.0 sec.	3.5 sec.	INA	3.0 sec.	2.9 sec.
Dump Time	1.0 sec.	2.5 sec.	1.5 sec.	INA	1.8 sec.	1.0 sec.

INA - Information Not Available.

*Tires used to calculate operating information and dimensions.

**Equipped with optional rear ctw.

***Rear tires filled with CaCl₂.

△ Equipped with optional transmission.

□ Clark 35C government unit also offers the same G.M. engines available on the standard Clark 35C.

W11B and Competition (Metric) cont.

Manufacturer & Model	Waldon 6000		Waldon 8500	
Operating Information Cont.				
Tipping Load - Straight	2132 kg	2132 kg	3810 kg	3810 kg
Tipping Load - 35°	1896 kg @37°	1896 kg @37°	—	—
Tipping Load - 40°	—	—	—	—
Tipping Load - 45°	—	—	3198 kg	3198 kg
Hydraulic Lift Capacity @Ground	2155 kg	2155 kg	6033 kg @Carry	6033 kg @Carry
Hydraulic Lift Capacity @Full Hgt.	1088 kg	1088 kg	2722 kg	2722 kg
Turn Radius over Bucket	2908 mm	2908 mm	INA	INA
Approx. Operating Weight	3991 kg	4146 kg	6349 kg	5847 kg
Dimensions				
Machine Hgt. over ROPS	2299 mm	2299 mm	2362 mm	2362 mm
Tire Tread (Std. Tires)	INA	INA	INA	INA
Width over Tires	1508 mm	1508 mm	1778 mm	1778 mm
Ground Clearance	INA	INA	INA	INA
Overall Length-Bucket on Ground	3905 mm	3905 mm	4521 mm	4521 mm
Wheelbase	1442 mm	1442 mm	1676 mm	1676 mm
Steering System				
Type	Hydraulic Power	Hydraulic Power	Hydraulic Power	Hydraulic Power
Steering Pump - Type	INA	INA	INA	INA
Steering Cylinders	? = 76 x 203 mm	? = 76 x 203 mm	? = 76 x 203 mm	? = 76 x 203 mm
Pump Capacity	Combined w/ Ldr. Pump	Combined w/ Ldr. Pump	Combined w/ Ldr. Pump	Combined w/ Ldr. Pump
Type Articulation	Center Pivot	Center Pivot	INA	INA
Loader Hydraulic System				
Type	Closed	Closed	INA	INA
Cylinders - Lift	2 = 76 x 660 mm	2 = 76 x 660 mm	2 = 102 x 660 mm	2 = 102 x 660 mm
Cylinders - Bucket	1 = 127 x 203 mm	212 = 127x203mm	1 = 127 x 254 mm	1 = 127 x 254 mm
Pump Type	Vane	Vane	INA	INA
Pump Capacity	141 lit/min @2200 rpm @12.4 kPa	141 lit/min @2200 rpm @12.4 kPa	121 lit/min @2250 rpm @17.5 kPa	121 lit/min @2250 rpm @17.5 kPa
Control Valve	2 Spool	2 Spool	INA	INA
Raise Time	5.3 sec.	5.3 sec.	INA	INA
Lower Time	3.5 sec.	3.5 sec.	INA	INA
Dump Time	INA	INA	INA	INA

W14 and Competition (U.S.A.)

Manufacturer & Model	Case W14	Case W14 Feedlot	Allis-Chalmers 840 C	Cat 910	Cat 920	Clark 35C
Engine						
Manufacturer	Case	Case	Mitsubishi	Caterpillar	Caterpillar	G.M.
Model	A336BD	A336BD	S6E2	3204	3304	3-53T
SAE Net hp @Gov rpm	83 @2200	83 @2200	83 @2500	65 @2400	80 @2200	80 @2400
Gross hp @Gov rpm	93 @2200	93 @2200	INA	INA	INA	89 @2400
Cubic Inch Displacement	336	336	270.6	318	425	159.2
Number of Cylinders	4	4	6	4	4	3
Electrical						
Voltage	24	24	24	12	24	12
Standard Alternator	40 amp	40 amp	30 amp	40 amp	35 amp	61 amp
Batteries	2-12 volt	2-12 volt	2-12 volt	1-12 volt	INA	INA
System Protection	Circuit Breakers	Circuit Breakers	INA	Circuit Breakers	Circuit Breakers	INA
Torque Converter						
Manufacturer	Allison	Allison	Okumara	Caterpillar	Caterpillar	Clark
Type	Twin Turbine	Twin Turbine	Single Stage	Single Stage	Single Stage	Single Stage
Multiplication Ratio	5.11:1	5.11:1	3.34:1	INA	INA	2.6:1
Transmission						
Manufacturer	Allison	Allison	Okumara	Caterpillar	Caterpillar	Clark
Type	Planetary	Planetary	Countershaft	Planetary	Planetary	Countershaft
No. Speeds, Fwd./Rev.	4/2	4/2	3/1	3/1 or 3/3	4/3	3/3
Speeds - Fwd.	3.2/7/11/22.4	3.2/7/11/22.4	5.7/11.2/22.6	4/7.2/14.8 or 4.3/8.2/14.6	4.0/7.3/11.9/24.6	3.5/6.8/17.9
Speed - Rev.	4.0/9.0	4.0/9.0	7.9	6.6 or 4.6/8.7/15.5	4.8/8.8/14.4	3.5/6.8/17.9
Automatic Shift	Yes 1-2, 3-4	Yes 1-2, 3-4	No	No	No	No
Modulation	Yes	Yes	Yes	Yes	Yes	Yes
Axles						
Manufacturer	Rockwell	Rockwell	Okumara	Caterpillar	Caterpillar	Clark
Type of Axle	Outboard Planetary	Outboard Planetary	Outboard Planetary	Outboard Planetary	Outboard Planetary	Outboard Planetary
Differential Front	Torque Prop	Torque Prop	Conventional	Conventional	Conventional	Torque Prop
Differential Rear	Torque Prop	Torque Prop	Conventional	Conventional	Conventional	Torque Prop
Type of Brakes	Drum/Disc	Drum/Disc	Disc	Disc - Front Only	Disc	Disc
Brake Actuation	Air/Hydraulic	Air/Hydraulic	Hydraulic	Hydraulic	Air/Hydraulic	Hydraulic
Standard Tires	15.5 x 25*	16.9 x 24*	15.5 x 25*	15.5 x 25*	15.5 x 25*	15.5 x 25*
Largest Tires (Opt.)	18.4 x 26	—	16.9 x 24	—	15.5 x 25	17.5 x 25
Rear Axle Oscillation	24°	24°	20°	22°	28°	18°
Operating Information						
Bucket - yd ³	1.50	2.0	1.50	1.25	1.50	1.50
Max. Hinge Pin Height	11'2"	12'1"	11'1.5"	10'2"	11'7"	10'11.5"
Reach @Max Hgt. @45° Dump	2'8"	2'7.5" @38°	2'8.9"	2'11"	2'5"	3'1.5"
Max. Dump Clear @45° Dump	8'10.5"	10'2" @38°	8'7"	8'	9'1"	8'5.5"
Rollback @Ground Level	45°	34°	38°	40°	39°	50° @Carry Position
Reach @7' Hgt. - 45° Dump	4'1.5"	4'9"	3'10.5"	3'8"	4'	4'8"
Digging Depth (Bucket Horizontal)	2.5"	1.2"	2"	3"	2.6"	2.6"
Breakout Force	12,361	10,149	13,195	12,915	17,419	13,600
Tipping Load - Straight	11,348**	8,330**	12,990**	10,614	13,253**	10,396**

INA - Information Not Available.

*Tires used to calculate operating information and dimensions.

**Equipped with optional rear ctw.

***Rear tires filled with CaCl₂.

△ Equipped with optional transmission.

□ Clark 35C government unit also offers the same G.M. engines available on the standard Clark 35C.

W14 and Competition (U.S.A.) cont.

□

Manufacturer & Model	Clark 35 C	Clark 35C Government	John Deere 444C	John Deere 444CH	Fiat Allis FR7	Fiat Allis 345B
Engine						
Manufacturer	G.M.	Perkins	John Deere	John Deere	Fiat Allis	Allis Chalmers
Model	3-53N	4.248	J.D. 329	J.D. 329-T	8045	2800 Mark I
SAE Net hp @Gov rpm	82 @2400	75 @2400	85 @2400	100 @2200	67 @2400	80 @2500
Gross hp @Gov rpm	89 @2400	82 @2400	95 @2400	105 @2200	71 @2400	INA
Cubic Inch Displacement	159.2	248	329	329	224	301
Number of Cylinders	3	4	6	6	4	6
Electrical						
Voltage	12	12	12	12	24	12
Standard Alternator	61 amp	61 amp	42 amp	42 amp	26 amp	51 amp
Batteries	INA	INA	2-12 volt	2-12 volt	2-12 volt	2-12 volt
System Protection	INA	INA	INA	INA	INA	Circuit Breakers
Torque Converter						
Manufacturer	Clark	Clark	Allison	Allison	Clark	Clark
Type	Single Stage	Single Stage	Twin Turbine	Twin Turbine	Single Stage	Single Stage
Multiplication Ratio	2.6:1	2.6:1	5.44:1	5.44:1	2.6:1	3.1:1
Transmission						
Manufacturer	Clark	Clark	Allison	Allison	Clark	Clark
Type	Countershaft	Countershaft	Planetary	Planetary	Countershaft	Countershaft
No. Speeds, Fwd./Rev.	3/3	3/3	4/2	4/2	3/3	3/3
Speeds - Fwd.	3.5/6.8/17.9	4.1/7.7/20.1	2.9/6.5/11/24.6	2.7/5.9/10.3/22.5	3.5/7.2/20.4	4.0/8.2/20.7
Speeds - Rev.	3.5/6.8/17.9	4.1/7.7/20.1	3.9/8.8	3.7/8.1	3.5/7.2/20.4	4.0/8.2/20.7
Automatic Shift	No	No	Yes 1-2, 3-4	Yes 1-2, 3-4	No	No
Modulation	Yes	Yes	Yes	No	Yes	Yes
Axles						
Manufacturer	Clark	Clark	Deere	Deere	Fiat Allis	INA
Type of Axle	Outboard Planetary	Outboard Planetary	Inboard Planetary	Inboard Planetary	Outboard Planetary	Outboard Planetary
Differential Front	Torque Prop	Torque Prop	Conventional	Conventional	Conventional	Torque Prop
Differential Rear	Torque Prop	Torque Prop	Conventional	Conventional	Conventional	Torque Prop
Type of Brakes	Disc	Disc	Disc	Disc	Disc	Drum
Brake Actuation	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Standard Tires	15.5 x 25*	15.5 x 25*	15.5 x 25* 13.00 x 24	15.5 x 25*	14.00 x 24	14.0 x 24
Largest Tires (Opt.)	17.5 x 25	17.5 x 25	17.5 x 25	17.5 x 25	15.5 x 25*	15.5 x 25* 17.5 x 25
Rear Axle Oscillation	18°	18°	22°	22°	26°	22°
Operating Information						
Bucket - yd ³	1.50	1.50	1.50	1.50	1.50	1.50
Max. Hinge Pin Height	10'11.5"	10'11.5"	11'4.1"	11'4.1"	11'2"	11'4"
Reach @Max. Hgt. @45° Dump	3'1.5"	3'1.5"	2'8.9"	2'8.9"	3'2"	3'3"
Max. Dump Clear @45° Dump	8'5.5"	8'5.5"	9'1.2"	9'1.2"	8'10"	9'4"
Rollback @Ground Level	50° @Carry Position	47° Carry Position	40°	40°	36°	45°
Reach @7' Hgt. - 45° Dump	4'8"	4'8"	4'4.4"	4'4.4"	4'11"	4'10.5"
Digging Depth (Bucket Horizontal)	2.6"	3.7"	4.1"	4.1"	5"	3"
Breakout Force	13,600	13,600	17,017	17,017	13,340	17,770
Tipping Load - Straight	10,396**	12,674**	13,515**	13,515**	9,235**	12,215**

W14 and Competition (U.S.A.) cont.

Manufacturer & Model	Ford A-62	Furukawa FL 120A	I.H. 510B	Kobelco LK300A	Komatsu W40-2	Owatonna 880
Engine						
Manufacturer	Ford	Isuzu	International	Mitsubishi	Komatsu	Perkins
Model	268DT	6BB1 (QD135)	D-268	6DR5C	4D105-5	4.248
SAE Net hp @Gov rpm	100 @2100	80 @2200	80 @2500	74 @2400	72 @2500	INA
Gross hp @Gov rpm	103 @2100	INA	85 @2500	INA	INA	83 @2450
Cubic Inch Displacement	268	329	268	244	264	248.2
Number of Cylinders	4	6	4	6	4	4
Electrical						
Voltage	12	INA	24	24	24	12
Standard Alternator	72 amp	INA	50 amp	21 amp	35 amp	55 amp
Batteries	1-12 volt	INA	2-12 volt	2-12 volt	2-12 volt	2-6 volt
System Protection	INA	INA	INA	INA	INA	INA
Torque Converter						
Manufacturer	Allison	INA	INA	INA	INA	Clark
Type	Twin Turbine	Single Stage	Single Stage	Single Stage	Single Stage	Single Stage
Multiplication Ratio	4.8:1	3.0:1	2.95:1	3.26:1	INA	2.91:1
Transmission						
Manufacturer	Allison	INA	INA	INA	INA	Clark
Type	Planetary	Countershaft	Countershaft	Countershaft	Countershaft	Countershaft
No. Speeds, Fwd./Rev.	4/2	4/2	3/3	3/1	3/3	3/3
Speeds - Fwd.	0-5.5/5.5-20	5/7.5/15/21.6	4.5/8.9/20.0	4.8/9.9/21.4	4.5/8.7/21.4	4/9/16-19
Speeds - Rev.	0-7.4	5/15	4.5/8.9/20.0	6.2	4.5/8.8/21.7	4/9/16-19
Automatic Shift	Yes 1-2, 3-4	No	No	No	No	No
Modulation	Yes	Yes	Yes	Yes	Yes	Yes
Axles						
Manufacturer	Ford	INA	INA	INA	INA	Rockwell
Type of Axle	Inboard Planetary	Inboard Planetary	Inboard Planetary	Outboard Planetary	Inboard Planetary	Outboard Planetary
Differential Front	Torque Prop	INA	Conventional	Conventional	Torque Prop	Torque Prop
Differential Rear	Torque Prop	INA	Conventional	Conventional	Torque Prop	Torque Prop
Type of Brakes	Disc	Disc	Disc	Disc	Disc	Drum
Brake Actuation	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Standard Tires	15.5 x 25*	15.5 x 25*	16.9 x 24*	16.9 x 24*	16.9 x 24*	16.9 x 24*
Largest Tires (Opt.)	17.5 x 25	15.5 x 25	15.5 x 25	16.9 x 24	15.5 x 25	15.5 x 25
Rear Axle Oscillation	24°	24°	24°	22°	24°	22°
Operating Information						
Bucket - yd ³	1.50	1.70	1.625	1.60	1.60	1.125
Max. Hinge Pin Height	11'11"	11'4"	11'	11'0.5"	11'	11'1"
Reach @Max. Hgt. @45° Dump	2'9.4"	3'1"	3'3.2"	3'1.8"	3'2"	3'7"
Max. Dump Clear @45° Dump	9'4"	9'	8'9"	8'10.1"	8'10"	8'8"
Rollback @Ground Level	45°	42°	37°	51° Carry Position	45.5° Carry Position	42°
Reach @7' Hgt. - 45° Dump	INA	3'8"	4'4.3"	INA	4'4"	INA
Digging Depth (Bucket Horizontal)	2.9"	4"	1.9"	8" @10°	1.2"	INA
Breakout Force	17,000	12,767	14,000	12,320	13,070	12,000
Tipping Load - Straight	14,965**	11,798	10,534**	10,470**	11,411	9,000***

INA - Information Not Available.

*Tires used to calculate operating information and dimensions.

**Equipped with optional rear ctw.

***Rear tires filled with CaCl₂.

△ Equipped with optional transmission.

□ Clark 35C government unit also offers the same G.M. engines available on the standard Clark 35C.

W14 and Competition (U.S.A.) cont.

Manufacturer & Model	Terex 22C / 72-15	Trojan 1500Z
Engine		
Manufacturer	Deutz	Deutz
Model	F4L912	F5L-912
SAE Net hp @Gov rpm	80 @2500	93 @2500
Gross hp @Gov rpm	84 @2500	108 @2500
Cubic Inch Displacement	230	288
Number of Cylinders	4	5
Electrical		
Voltage	12	24
Standard Alternator	30 amp	35 amp
Batteries	1-12 volt	INA
System Protection	INA	INA
Torque Converter		
Manufacturer	Hydromatic	Clark
Type	Hydrostatic	Single Stage
Multiplication Ratio	—	2.6:1
Transmission		
Manufacturer	Hydromatic	Clark
Type	Hydrostatic/ Mechanical	Countershaft
No. Speeds, Fwd./Rev.	2/2	3/3
Speeds - Fwd.	0-9/0-18	3.7/8.2/21.7
Speeds - Rev.	0-9/0-18	3.7/8.2/21.7
Automatic Shift	No	No
Modulation	No	Yes
Axles		
Manufacturer	Mercedes	Faan
Type of Axle	Non Planetary	Outboard Planetary
Differential Front	INA	Limited Slip
Differential Rear	INA	Limited Slip
Type of Brakes	Disc	Disc
Brake Actuation	Hydraulic	Air/Hydraulic
Standard Tires	15.5 x 25*	15.5 x 25*
Largest Tires (Opt.)	—	17.5 x 25
Rear Axle Oscillation	26° Frame Center Pivot	26°
Operating Information		
Bucket - yd ³	1.50	1.50
Max. Hinge Pin Height	11'4"	11'4.875"
Reach @Max. Hgt. @45° Dump	2'4"	2'6"
Max. Dump Clear @45° Dump	9'	8'11.75"
Rollback @Ground Level	47° Carry Position	39°
Reach @7' Hgt. - 45° Dump	3'9.5"	3'10"
Digging Depth (Bucket Horizontal)	8" @10°	INA
Breakout Force	13,228	19,694
Tipping Load - Straight	10,383	13,720

W14 and Competition (U.S.A.) cont.

Manufacturer & Model	Case W14	Case W14 Feedlot	Allis-Chalmers 840C	Cat 910	Cat 920	Clark 35C
Operating Information Cont.						
Tipping Load - 35°	10,203**	7,405***	11,255**	9,630 △	12,180**	9,644**
Tipping Load - 40°	9,865**	7,134***	10,867**	—	—	—
Tipping Load - 45°	—	—	—	—	—	—
Hydraulic Lift Capacity @Ground	15,200	INA	INA	INA	INA	INA
Hydraulic Lift Capacity @Full Hgt.	8,340	INA	7,910	INA	INA	INA
Turn Radius over Bucket	16'4"	17'3"	INA	16'8"	18'3.5"	18'
Approx. Operating Weight	15,700**	16,200***	16,625**	15,040 △	18,490**	17,729**
4-IN-1 Bucket						
Max. Dump Clear @45°	9'1.5"	Not	8'2"	8'	8'7"	Not
Bottom Dump Clear @45°	11'	Available	INA	9'2"	INA	Available
Fwd. Dump Reach @45° Discharge	3'	On This	3'6"	2'9"	2'8"	Thru
Reach @45° Dump Angle 7' Clear	5'	Unit	4'3"	3'7"	4'	Clark
Breakout Force	12,058		12,380	13,545	14,099	
Tipping Load - Straight	10,926**		12,360**	10,076 △	12,301**	
Tipping Load - 35°	9,787**		10,625**	9,540 △	11,273**	
Tipping Load - 40°	9,454**		10,237**	—	—	
Tipping Load - 45°	—		—	—	—	
Approx. Operating Weight	16,090**		17,255**	15,660 △	18,990**	
Bucket - yd ³	1.25		1.25	1.0	1.5	
Dimensions						
Machine Hgt. over ROPS	10'	10'1"	9'10.75"	9'11"	10'3"	10'
Tire Tread (Std. Tires)	68"	69"	68.7"	65"	73"	69"
Width over Tires	84"	85.5"	85"	82"	89"	83.5"
Ground Clearance	16"	17"	15.2"	16"	13.2"	14.5"
Overall Length-Bucket on Ground	18'4"	20'1"	18'1.4"	19'	18'9"	19'5.6"
Wheelbase	100"	100"	96.5"	92"	100"	100"
Steering System						
Type	Hydrostatic	Hydrostatic	Hydrostatic	Hydraulic Power	Hydraulic Power	Hydraulic Power
Steering Pump Type	Gear	Gear	Gear	Gear	Vane	Gear
Steering Cylinders	2 = 2.5" x 14.1"	2 = 2.5" x 14.1"	2 = 1.97" x 17.9"	INA	2 = 3" x ?	2 = 2.5" x 13"
Pump Capacity	21 gpm @2200 rpm @2000 psi	21 gpm @2200 rpm @2000 psi	Combined w/ Ldr. Pump	14 gpm @2400 rpm @2500 psi	25.4 gpm @2200 rpm @1000 psi	27.6 gpm @2400 rpm @1600 psi
Type Articulation	Center Pivot	Center Pivot	Center Pivot	Center Pivot	Center Pivot	Non Center Pivot
Loader Hydraulic System						
Type	Closed, Positive Air Pressurized	Closed, Positive Air Pressurized	INA	Sealed	Sealed	Closed Pressurized
Cylinders - Lift	2 = 4.5" x 25.38"	2 = 4.5" x 25.38"	2 = 4.33" x 27.17"	2 = 4.0" x 23.88"	2 = 4.25" x 30.8"	2 = 4" x 26.77"
Cylinders - Bucket	2 = 3" x 30.5"	2 = 3" x 30.5"	1 = 4.33" x 17.32"	2 = 3" x 21.87"	2 = 4" x 16.6"	2 = 3.5" x 25.80"
Pump Type	Gear	Gear	Gear	Dual Stage Gear	INA	Gear
Pump Capacity	34 gpm @2200 rpm @2200 psi	34 gpm @2200 rpm @2200 psi	29.5 gpm @2500 rpm @2350 psi	22 gpm @2400 rpm @2500 psi	33.3 gpm @2200 rpm @1000 psi	27.6 gpm @2400 rpm @1600 psi
Control Valve	2 Spool	3 Spool	2 Spool	2 Spool	2 Spool	2 Spool
Raise Time	5.5 sec.	6.1 sec.	6.7 sec.	6.0 sec.	6.0 sec.	6.0 sec.
Lower Time	4.0 sec.	2.4 sec.	4.7 sec.	3.5 sec.	3.0 sec.	2.8 sec.
Dump Time	1.7 sec.	2.0 sec.	1.0 sec.	1.3 sec.	1.2 sec.	1.4 sec.

INA - Information Not Available.

*Tires used to calculate operating information and dimensions.

**Equipped with optional rear ctw.

***Rear tires filled with CaCl₂.

△ Equipped with optional transmission.

□ Clark 35C government unit also offers the same G.M. engines available on the standard Clark 35C.

W14 and Competition (U.S.A.) cont.

Manufacturer & Model	Clark 35C	Clark 35C Government	John Deere 444C	John Deere 444CH	Fiat Allis FR7	Fiat Allis 345B
Operating Information Cont.						
Tipping Load - 35°	9,644**	11,533**	12,121**	12,121**	—	10,835**
Tipping Load - 40°	—	—	11,686**	11,686**	8,290**	10,432**
Tipping Load - 45°	—	—	—	—	—	—
Hydraulic Lift Capacity @ Ground	INA	INA	18,200	18,200	INA	INA
Hydraulic Lift Capacity @ Full Hgt.	INA	INA	7,550	7,550	INA	INA
Turn Radius over Bucket	18'	18'	16'	16'	17'0.5"	16'1"
Approx. Operating Weight	17,729**	18,838**	18,427**	18,427**	15,255**	16,890**
4-IN-1 Bucket						
Max. Dump Clear @45°	Not	8'8.5"	8'5.5"	8'5.5"	8'9"	8'10.7"
Bottom Dump Clear @45°	Available	INA	INA	INA	INA	INA
Fwd. Dump Reach @45° Discharge	Thru	3'	2'9.35"	2'9.35"	3'3"	3'9.5"
Reach @45° Dump Angle 7' Clear	Clark	4'9"	3'11.7"	3'11.7"	5'	5'7.1"
Breakout Force		13,160	14,639	14,639	13,580	13,200
Tipping Load - Straight		11,338**	11,275**	11,275**	8,700**	10,868**
Tipping Load - 35°		10,317**	10,026**	10,026**	—	9,573**
Tipping Load - 40°		—	9,621**	9,621**	7,770**	9,196**
Tipping Load - 45°		—	—	—	—	—
Approx. Operating Weight		19,938**	19,375**	19,375**	15,695**	16,901**
Bucket - yd ³		1.25	1.5	1.5	1.1	1.25
Dimensions						
Machine Hgt. over ROPS	10'	10'	9'11"	9'11"	9'6"	9'9"
Tire Tread (Std. Tires)	69"	69"	67.7"	67.7"	64"	70"
Width over Tires	83.5"	85"	85.5"	85.5"	79"	87"
Ground Clearance	14.5"	14.5"	15.2"	15.2"	14"	15"
Overall Length-Bucket on Ground	19'5.6"	20'	19'	19'	19'	18'1"
Wheelbase	100"	100"	94.5"	94.5"	93"	96"
Steering System						
Type	Hydraulic Power	Hydraulic Power	Hydraulic Power	Hydraulic Power	Hydraulic Power	Hydrostatic
Steering Pump Type	Gear	Gear	Piston	Piston	Gear	Gear
Steering Cylinders	2 = 2.5" x 13"	2 = 2.5" x 13"	2 = 3" x 15.75"	2 = 3" x 15.75"	2 = 2.6" x 11.9"	2 = 3" x 19.4"
Pump Capacity	27.6 gpm @2400 rpm @1600 psi	27.6 gpm @2400 rpm @1600 psi	20.6 gpm @1800 rpm @2000 psi	20.6 gpm @1800 rpm @2000 psi	Combined w/ Ldr. Pump	12 gpm @2500 rpm @2350 psi
Type Articulation	Non Center Pivot	Non Center Pivot	Non Center Pivot	Non Center Pivot	Center Pivot	Center Pivot
Loader Hydraulic System						
Type	Closed Pressurized	Closed Pressurized	Sealed	Sealed	Sealed	Closed/Pressure & Vacuum Relief
Cylinders - Lift	2 = 4" x 26.77"	2 = 4" x 26.77"	2 = 5.25" x 22.5"	2 = 5.25" x 22.5"	2 = 3.9" x 28.2"	2 = 4" x 31.4"
Cylinders - Bucket	2 = 3.5" x 25.80"	2 = 3.5" x 25.8"	1 = 5.25" x 25.3"	1 = 5.25" x 25.3"	2 = 3.9" x 15.0"	2 = 3" x 36"
Pump Type	Gear	Gear	Gear	Gear	Gear	Gear
Pump Capacity	27.6 gpm @2400 rpm @1600 psi	27.6 gpm @2400 rpm @1600 psi	40 gpm @2400 rpm @600 psi	36.6 gpm @2200 rpm @600 psi	30.4 gpm @2400 rpm @1000 psi	30 gpm @2500 rpm @2350 psi
Control Valve	2 Spool	2 Spool	2 Spool	2 Spool	3 Spool	2 Spool
Raise Time	6.0 sec.	6.0 sec.	5.8 sec.	6.3 sec.	5.4 sec.	6.5 sec.
Lower Time	2.8 sec.	2.8 sec.	4.0 sec.	4.0 sec.	1.3 sec.	3.4 sec.
Dump Time	1.4 sec.	1.4 sec.	1.6 sec.	1.6 sec.	3.0 sec.	2.9 sec.

W14 and Competition (U.S.A.) cont.

Manufacturer & Model	Ford A-62	Furukawa FL120A	I.H. 510B	Kobelco LK300A	Komatsu W40-2	Owatonna 880
Operating Information Cont.						
Tipping Load - 35°	13,275**	—	—	—	—	—
Tipping Load - 40°	12,922**	10,340	8,955**	9,260	9,700	8,000***
Tipping Load - 45°	12,541**	—	—	—	—	—
Hydraulic Lift Capacity @Ground	INA	INA	12,245 Carry Position	INA	13,210 Carry Position	INA
Hydraulic Lift Capacity @Full Hgt.	INA	INA	INA	INA	INA	7,500
Turn Radius over Bucket	14'11"	16'4"	16'2"	16'0.1"	16'2"	15'6"
Approx. Operating Weight	20,000**	16,430	14,548**	14,550**	14,950	15,000***
4-IN-1 Bucket						
Max. Dump Clear @45°	Not	9'1"	8'8"	INA, But	8'2"	INA, But
Bottom Dump Clear @45°	Available	INA	INA	Kobelco	INA	Owatonna
Fwd. Dump Reach @45° Discharge	Thru	3'	3'0.5"	Offers One	3'2"	Offers One
Reach @45° Dump Angle 7' Clear	Ford	3'8"	4'4"	in Their	4'	in Their
Breakout Force		13,470	13,920	Price List	10,190	Price List
Tipping Load - Straight		11,138	10,023**		10,221	
Tipping Load - 35°		—	—		—	
Tipping Load - 40°		9,750	8,520**		8,680	
Tipping Load - 45°		—	—		—	
Approx. Operating Weight		18,030	15,263**		15,830	
Bucket - yd³		1.3	1.25	1.3	1.3	1.125
Dimensions						
Machine Hgt. over ROPS	10'3"	9'5"	10'2"	9'8.5"	INA	9'7"
Tire Tread (Std. Tires)	68.5"	INA	71.7"	68.9"	70"	67"
Width over Tires	85.5"	INA	90.2"	86.2"	87"	84"
Ground Clearance	15"	14.8"	16.1"	15.75"	16"	16"
Overall Length-Bucket on Ground	19'	19'3"	18'	18'4.1"	17'9"	18'2.5"
Wheelbase	103"	94"	96"	96"	96"	82"
Steering System						
Type	Hydraulic Power	Hydraulic Power	Hydrostatic	Hydraulic Power	Hydraulic Power	Hydraulic Power
Steering Pump Type	Gear	Gear	Gear	Gear	Gear	INA
Steering Cylinders	2 = 3" x 16.94"	2 = ? x ?	2 = 3" x 16.2"	2 = 2" x 15.4"	2 = 3.1" x 16"	INA
Pump Capacity	13 gpm @2100 rpm @2500 psi	Combined w/ Ldr. Pump	INA	15.9 gpm @2400 rpm @2490 psi	INA	12 gpm @2450 rpm @1600 psi
Type Articulation	Center Pivot	Center Pivot	Center Pivot	Center Pivot	Center Pivot	Non Center Pivot
Loader Hydraulic System						
Type	Pressurized	Sealed	Closed with Pressure Control	Closed and Pressurized	Sealed	INA
Cylinders - Lift	2 = 4.5" x 26.35"	2 = 3.94" x 25.4"	2 = 4" x 22"	2 = 3.9" x 22"	2 = 4.3" x 22"	INA
Cylinders - Bucket	1 = 5.5" x 26.91"	1 = 3.54" x 19.9"	1 = 4" x 17.5"	2 = 3" x 24.4"	1 = 3.9" x 17"	INA
Pump Type	Gear	Gear	Gear	Gear	Gear	Gear
Pump Capacity	34 gpm @2100 rpm @2500 psi	34.2 gpm @2200 rpm @ ? psi	24.5 gpm @2500 rpm @3000 psi	21.9 gpm @2400 rpm @2987 psi	31.7 gpm @2500 rpm @3000 psi	28 gpm @2450 rpm @1600 psi
Control Valve	2 Spool	2 Spool	2 Spool	2 Spool	2 Spool	2 Spool
Raise Time	6.0 sec.	INA	5.9 sec.	5.8 sec.	INA	7.0 sec.
Lower Time	3.2 sec.	INA	4.5 sec.	2.4 sec.	INA	5.0 sec.
Dump Time	1.3 sec.	INA	1.8 sec.	1.6 sec.	INA	2.5 sec.

INA - Information Not Available.

*Tires used to calculate operating information and dimensions.

**Equipped with optional rear ctw.

***Rear tires filled with CaCl₂.

△ Equipped with optional transmission.

□ Clark 35C government unit also offers the same G.M. engines available on the standard Clark 35C.

W14 and Competition (U.S.A.) cont.

Manufacturer & Model	Terex 22C / 72.15	Trojan 1500Z
Operating Information Cont.		
Tipping Load - 35°	—	—
Tipping Load - 40°	9,296 @37°	12,934 @42°
Tipping Load - 45°	—	—
Hydraulic Lift Capacity @Ground	INA	INA
Hydraulic Lift Capacity @Full Hgt.	12,125	INA
Turn Radius over Bucket	16'	16'9.625"
Approx. Operating Weight	14,703	17,247
4-IN-1 Bucket		
Max. Dump Clear @45°	INA, But	8'10.5"
Bottom Dump Clear @45°	Terex	INA
Fwd. Dump Reach @45° Discharge	Offers One	2'4.25"
Reach @45° Dump Angle 7' Clear	in Their	3'11.3"
Breakout Force	Price List	18,750
Tipping Load - Straight		11,543
Tipping Load - 35°		—
Tipping Load - 40°		10,065 @42°
Tipping Load - 45°		—
Approx. Operating Weight		18,149
Bucket - yd³	1.3	1.5
Dimensions		
Machine Hgt. over ROPS	10'5"	10'5.25"
Tire Tread (Std. Tires)	56.75"	69"
Width over Tires	69"	88.25"
Ground Clearance	21"	14.75"
Overall Length-Bucket on Ground	17'9"	19'8"
Wheelbase	87"	108.25"
Steering System		
Type	Hydraulic Power	Hydraulic Power
Steering Pump Type	Gear	Gear
Steering Cylinders	2 = 2.36" x 11.8"	2 = 2.5" x 15.3"
Pump Capacity	12.7 gpm @2500 rpm @2175 psi	16.9 gpm @2500 rpm @2175 psi
Type Articulation	Center Pivot	Center Pivot
Loader Hydraulic System		
Type	Closed and Pressurized	Sealed and Pressurized
Cylinders - Lift	2 = 3.9" x 23.6"	2 = 4" x 28"
Cylinders - Bucket	2 = 3.0" x 20"	1 = 4.75" x 17.5"
Pump Type	Gear	Gear
Pump Capacity	25.4 gpm @2500 rpm @2610 psi	33.2 gpm @2500 rpm @2320 psi
Control Valve	2 Spool	2 Spool
Raise Time	6.0 sec.	5.2 sec.
Lower Time	3.5 sec.	3.3 sec.
Dump Time	3.0 sec.	1.0 sec.

W14 and Competition (Metric)

Manufacturer & Model	Case W14	Case W14 Feedlot	Allis-Chalmers 840C	Cat 910	Cat 920	Clark 35C
Engine						
Manufacturer	Case	Case	Mitsubishi	Caterpillar	Caterpillar	G.M.
Model	A336BD	A336BD	S6E2	3204	3304	3-53T
SAE Net hp @Gov rpm	61.9 kW @2200	61.9 kW @2200	61.9 kW @2500	48 kW @2400	59.6 kW @2200	60 kW @2400
Gross hp @Gov rpm	69.4 kW @2200	69.4 kW @2200	INA	INA	INA	66 kW @2400
Displacement	5506 cm ³	5506 cm ³	4440 cm ³	5211 cm ³	6965 cm ³	2609 cm ³
Number of Cylinders	4	4	6	4	6	3
Electrical						
Voltage	24	24	24	12	24	12
Standard Alternator	40 amp	40 amp	30 amp	40 amp	35 amp	61 amp
Batteries	2-12 volt	2-12 volt	2-12 volt	1-12 volt	INA	INA
System Protection	Circuit Breakers	Circuit Breakers	INA	Circuit Breakers	Circuit Breakers	INA
Torque Converter						
Manufacturer	Allison	Allison	Okumara	Caterpillar	Caterpillar	Clark
Type	Twin Turbine	Twin Turbine	Single Stage	Single Stage	Single Stage	Single Stage
Multiplication Ratio	5.11:1	5.11:1	3.34:1	INA	INA	2.6:1
Transmission						
Manufacturer	Allison	Allison	Okumara	Caterpillar	Caterpillar	Clark
Type	Planetary	Planetary	Countershaft	Planetary	Planetary	Countershaft
No. Speeds, Fwd./Rev.	4/2	4/2	3/1	3/1 or 3/3	4/3	3/3
Speeds - Fwd. (km/h)	5.3/11.3/17.7/36.1	5.3/11.3/17.7/36.1	9.2/18/36.4	6.5/11.7/23.9 or 6.9/13.2/23.5	6.4/11.7/19.2/39.6	5.6/10.9/28.8
Speeds - Rev. (km/h)	6.4/14.5	6.4/14.5	12.7	10.8 or 7.4/14/24.9	7.7/14.2/23.2	5.6/10.9/28.8
Automatic Power Shift	Yes 1-2, 3-4	Yes 1-2, 3-4	No	No	No	No
Modulation	Yes	Yes	Yes	Yes	Yes	Yes
Axles						
Manufacturer	Rockwell	Rockwell	Okumara	Caterpillar	Caterpillar	Clark
Type of Axle	Outboard Planetary	Outboard Planetary	Outboard Planetary	Outboard Planetary	Outboard Planetary	Outboard Planetary
Differential Front	Torque Prop	Torque Prop	Conventional	Conventional	Conventional	Torque Prop
Differential Rear	Torque Prop	Torque Prop	Conventional	Conventional	Conventional	Torque Prop
Type of Brakes	Drum/Disc	Drum/Disc	Disc	Disc - Front Only	Disc	Disc
Brake Actuation	Air/Hydraulic	Air/Hydraulic	Hydraulic	Hydraulic	Air/Hydraulic	Hydraulic
Standard Tires	15.5 x 25*	16.9 x 24*	15.5 x 25*	15.5 x 25*	15.5 x 25*	15.5 x 25*
Largest Tires (Opt.)	18.4 x 26	—	16.9 x 24	—	15.5 x 25	17.5 x 25
Rear Axle Oscillation	24°	24°	20°	22°	28°	18°
Operating Information						
Bucket - m ³	1.15 m ³	1.53 m ³	1.15 m ³	1.0 m ³	1.15 m ³	1.15 m ³
Max. Hinge Pin Height	3404 mm	3683 mm	3390 mm	3086 mm	3530 mm	3340 mm
Reach @Max. Hgt. @45° Dump	813 mm	800 mm @38°	835 mm	884 mm	740 mm	952 mm
Max. Dump Clear @45° Dump	2705 mm	3091 mm @38°	2616 mm	2440 mm	2770 mm	2578 mm
Rollback @Ground Level	45°	34°	38°	40°	39°	50° Carry Position
Reach @7' Hgt. - 45° Dump	1258 mm	1448 mm	1181 mm	1130 mm	1220 mm	1422 mm
Digging Depth (Bucket Horizontal)	63.5 mm	30.5 mm	3.2 mm	79 mm	66 mm	66 mm
Breakout Force	5607 kg	4604 kg	5985 kg	5858 kg	7901 kg	6169 kg
Tipping Load - Straight	5147 kg**	3778 kg***	5892 kg**	4814 kg	6012 kg**	4716 kg**

INA - Information Not Available.

*Tires used to calculate operating information and dimensions.

**Equipped with optional rear ctw.

***Rear tires filled with CaCl₂.

△ Equipped with optional transmission.

□ Clark 35C government unit also offers the same G.M. engines available on the standard Clark 35C.

W14 and Competition (Metric) cont.

Manufacturer & Model	Clark 35C	Clark 35C Government	John Deere 444C	John Deere 444CH	Fiat Allis FR7	Fiat Allis 345B
Engine						
Manufacturer	G.M.	Perkins	John Deere	John Deere	Fiat Allis	Allis-Chalmers
Model	3-53N	4.248	J.D. 329	J.D. 329-T	8045	2800 Mark I
SAE Net hp @Gov rpm	61 kW @2400	56 kW @2400	63.4 kW @2400	75 kW @2200	50 kW @2400	59.6 kW @2500
Gross hp @Gov rpm	66 kW @2400	61 kW @2400	71 kW @2400	78 kW @2200	52 kW @2400	INA
Displacement	2609 cm ³	4060 cm ³	5391 cm ³	5391 cm ³	3670 cm ³	4933 cm ³
Number of Cylinders	3	4	6	6	4	6
Electrical						
Voltage	12	12	12	12	24	12
Standard Alternator	61 amp	61 amp	42 amp	42 amp	26 amp	51 amp
Batteries	INA	INA	2-12 volt	2-12 volt	2-12 volt	2-12 volt
System Protection	INA	INA	INA	INA	INA	INA
Torque Converter						
Manufacturer	Clark	Clark	Allison	Allison	Clark	Clark
Type	Single Stage	Single Stage	Twin Turbine	Twin Turbine	Single Stage	Single Stage
Multiplication Ratio	2.6:1	2.6:1	5.44:1	5.44:1	2.6:1	3.1:1
Transmission						
Manufacturer	Clark	Clark	Allison	Allison	Clark	Clark
Type	Countershaft	Countershaft	Planetary	Planetary	Countershaft	Countershaft
No. Speeds, Fwd./Rev.	3/3	3/3	4/2	4/2	3/3	3/3
Speeds - Fwd. (km/h)	5.6/10.9/28.8	6.6/12.4/32.3	4.7/10.5/17.7/39.6	4.3/9.5/16.6/36.2	5.6/11.6/32.8	6.4/13.2/33.3
Speeds - Rev. (km/h)	5.6/10.9/28.8	6.6/12.4/32.3	6.3/14.2	6.0/13	5.6/11.6/32.8	6.4/13.2/33.3
Automatic Power Shift	No	No	Yes 1-2, 3-4	Yes 1-2, 3-4	No	No
Modulation	Yes	Yes	Yes	Yes	Yes	Yes
Axles						
Manufacturer	Clark	Clark	Deere	Deere	Fiat Allis	INA
Type of Axle	Outboard Planetary	Outboard Planetary	Inboard Planetary	Inboard Planetary	Outboard Planetary	Outboard Planetary
Differential Front	Torque Prop	Torque Prop	Conventional	Conventional	Conventional	Torque Prop
Differential Rear	Torque Prop	Torque Prop	Conventional	Conventional	Conventional	Torque Prop
Type of Brakes	Disc	Disc	Disc	Disc	Disc	Drum
Brake Actuation	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Standard Tires	15.5 x 25*	15.5 x 25*	15.5 x 25* 13.00 x 24	15.5 x 25*	14.00 x 24	14.00 x 24
Largest Tires (Opt.)	17.5 x 25	17.5 x 25	17.5 x 25	17.5 x 25	15.5 x 25*	15.5 x 25* 17.5 x 25
Rear Axle Oscillation	18°	18°	22°	22°	26°	22°
Operating Information						
Bucket - m ³	1.15 m ³	1.15 m ³	1.15 m ³	1.15 m ³	1.15 m ³	1.15 m ³
Max. Hinge Pin Height	3340 mm	3340 mm	3460 mm	3460 mm	3405 mm	3455 mm
Reach @Max. hgt. @45° Dump	952 mm	952 mm	836 mm	836 mm	970 mm	987 mm
Max. Dump Clear @45° Dump	2578 mm	2578 mm	2770 mm	2770 mm	2680 mm	2844 mm
Rollback @Ground Level	50° Carry Position	47° Carry Position	40°	40°	36°	45°
Reach @7' Hgt. - 45° Dump	1422 mm	1422 mm	1330 mm	1330 mm	1500 mm	1489 mm
Digging Depth (Bucket Horizontal)	66 mm	94 mm	104 mm	104 mm	130 mm	80 mm
Breakout Force	6169 kg	6169 kg	7719 kg	7719 kg	6051 kg	8060 kg
Tipping Load - Straight	4716 kg**	5749 kg**	6130 kg**	6130 kg**	4190 kg**	5541 kg**

W14 and Competition (Metric) cont.

Manufacturer & Model	Ford A-62	Furukawa FL120A	I.H. 510B	Kobelco LK300A	Komatsu W40-2	Owatonna 880
Engine						
Manufacturer	Ford	Isuzu	International	Mitsubishi	Komatsu	Perkins
Model	268DT	6BB1(QD 135)	D-268	6DR5C	4D105-5	4.248
SAE Net hp @ Gov rpm	75.1 kW @2100	60 kW @2200	59.7 kW @2500	55 kW @2400	54 kW @2500	INA
Gross hp @ Gov rpm	77.1 kW @2100	INA	63.4 kW @2500	INA	INA	61.9 kW @2400
Displacement	4400 cm ³	5393 cm ³	4392 cm ³	3988 cm ³	4330 cm ³	4067 cm ³
Number of Cylinders	4	6	4	6	4	4
Electrical						
Voltage	12	INA	24	24	24	12
Standard Alternator	72 amp	INA	50 amp	21 amp	35 amp	55 amp
Batteries	1-12 volt	INA	2-12 volt	2-12 volt	2-12 volt	2-6 volt
System Protection	INA	INA	Circuit Breaker	INA	INA	INA
Torque Converter						
Manufacturer	Allison	INA	INA	INA	INA	Clark
Type	Twin Turbine	Single Stage	Single Stage	Single Stage	Single Stage	Single Stage
Multiplication Ratio	4.8:1	3.0:1	2.95:1	3.26:1	INA	2.91:1
Transmission						
Manufacturer	Allison	INA	INA	INA	INA	Clark
Type	Planetary	Countershaft	Countershaft	Countershaft	Countershaft	Countershaft
No. Speeds, Fwd./Rev.	4/2	4/2	3/3	3/1	3/3	3/3
Speeds - Fwd. (km/h)	0-8.9/8.9-32.2	8/12/24/34.8	7.2/14.3/32.2	7.8/16/34.5	7.2/14/34.5	6.4/14.5/29.0
Speeds - Rev. (km/h)	0-11.9	8/24	7.2/14.3/32.2	10	7.2/14.1/35	6.4/14.5/29.0
Automatic Power Shift	Yes 1-2, 3-4	No	No	No	No	No
Modulation	Yes	Yes	Yes	Yes	Yes	Yes
Axles						
Manufacturer	Ford	INA	INA	INA	INA	Rockwell
Type of Axle	Inboard Planetary	Inboard Planetary	Inboard Planetary	Outboard Planetary	Inboard Planetary	Outboard Planetary
Differential Front	Torque Prop	INA	Conventional	Conventional	Torque Prop	Torque Prop
Differential Rear	Torque Prop	INA	Conventional	Conventional	Torque Prop	Torque Prop
Type of Brakes	Disc	Disc	Disc	Disc	Disc	Drum
Brake Actuation	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Standard Tires	15.5 x 25*	15.5 x 25*	16.9 x 24	16.9 x 24*	16.9 x 24*	16.9 x 24*
Largest Tires (Opt.)	17.5 x 25	15.5 x 25	15.5 x 25*	16.9 x 24	15.5 x 25	15.5 x 25
Rear Axle Oscillation	24°	24°	24°	22°	24°	22°
Operating Information						
Bucket - m ³	1.2 m ³	1.3 m ³	1.24 m ³	1.2 m ³	1.2 m ³	.86 m ³
Max. Hinge Pin Height	3632 mm	3460 mm	3360 mm	3365 mm	3355 mm	3378 mm
Reach @ Max. Hgt. @45° Dump	848 mm	930 mm	1000 mm	960 mm	975 mm	1092 mm
Max. Dump Clear @45° Dump	2845 mm	2740 mm	2670 mm	2695 mm	2680 mm	2642 mm
Rollback @ Ground Level	45°	42°	37°	51° Carry Position	45°-50° Carry Position	42°
Reach @7' Hgt. - 45° Dump	INA	1130 mm	1330 mm	INA	1320 mm	INA
Digging Depth (Bucket Horizontal)	69 mm	10 mm	49 mm	204 mm @ 10°	30 mm	INA
Breakout Force	7711 kg	5790 kg	6350 kg	5590 kg	5930 kg	5443 kg
Tipping Load Straight	6788 kg**	5352 kg	4778 kg**	4750 kg**	5176 kg	4082 kg***

INA - Information Not Available.

*Tires used to calculate operating information and dimensions.

**Equipped with optional rear ctw.

**Rear tires filled with CaCl₂.

△ Equipped with optional transmission.

□ Clark 35C government unit also offers the same G.M. engines available on the standard Clark 35C.

W14 and Competition (Metric) cont.

Manufacturer & Model	Terex 22C / 72-15	Trojan 1500 Z
Engine		
Manufacturer	Deutz	Deutz
Model	F4L912	F5L-912
SAE Net hp @Gov rpm	59.7 kW @2500	69.3 kW @2500
Gross hp @Gov rpm	62.6 kW @2500	80.5 kW @2500
Displacement	3760 cm ³	4700 cm ³
Number of Cylinders	4	5
Electrical		
Voltage	12	24
Standard Alternator	30 amp	35 amp
Batteries	1-12 volt	INA
System Protection	INA	INA
Torque Converter		
Manufacturer	Hydromatic	Clark
Type	Hydrostatic	Single Stage
Multiplication Ratio	—	2.6:1
Transmission		
Manufacturer	Hydromatic	Clark
Type	Hydrostatic/ Mechanical	Countershaft
No. Speeds, Fwd./Rev.	2/2	3/3
Speeds - Fwd. (km/h)	0-14/0-29	5.9/13.2/34.9
Speeds - Rev. (km/h)	0-14/0-29	5.9/13.2/34.9
Automatic Power Shift	No	No
Modulation	No	Yes
Axles		
Manufacturer	Mercedes	Faun
Type of Axle	Non Planetary	Outboard Planetary
Differential Front	INA	Limited Slip
Differential Rear	INA	Limited Slip
Type of Brakes	Disc	Disc
Brake Actuation	Hydraulic	Air/Hydraulic
Standard Tires	15.5 x 25*	15.5 x 25*
Largest Tires (Opt.)	15.5 x 25	17.5 x 25
Rear Axle Oscillation	26° Frame Center Pivot	26°
Operating Information		
Bucket - m ³	1.15 m ³	1.1 m ³
Max. Hinge Pin Height	3450 mm	3476 mm
Reach @Max. Hgt. @45° Dump	710 mm	762 mm
Max. Dump Clear @45° Dump	2735 mm	2736 mm
Rollback @Ground Level	47° Carry Position	39°
Reach @7' Hgt. - 45° Dump	1150 mm	1168 mm
Digging Depth (Bucket Horizontal)	210 mm @10°	INA
Breakout Force	6000 kg	8933 kg
Tipping Load - Straight	4710 kg	6223 kg

W14 and Competition (Metric) cont.

Manufacturer & Model	Case W14	Case W14 Feedlot	Allis-Chalmers 840C	Cat 910	Cat 920	Clark 35C
Operating Information Cont.						
Tipping Load - 35°	4628 kg**	3359 kg***	5105 kg**	4504 kg Δ	5525 kg**	4374 kg**
Tipping Load - 40°	4475 kg**	3236 kg***	4929 kg**	—	—	—
Tipping Load - 45°	—	—	—	—	—	—
Hydraulic Lift Capacity @Ground	6895 kg	INA	INA	INA	INA	INA
Hydraulic Lift Capacity @Full Hgt.	3783 kg	INA	3588 kg	INA	INA	INA
Turn Radius over Bucket	4978 mm	5258 mm	INA	5070 mm	5600 mm	5486 mm
Approx. Operating Weight	7121 kg**	7348 kg***	7541 kg**	6822 kg Δ	8387 kg**	8042 kg**
4-IN-1 Bucket						
Bucket - m³	.97 m³	Not	.97 m³	0.8 m³	1.15 m³	Not
Max. Dump Clear @45°	2781 mm	Available	2489 mm	2440 mm	2620 mm	Available
Bottom Dump Clear @45°	3353 mm	On This	INA	2790 mm	INA	Thru
Fwd. Dump Reach @45° Discharge	914 mm	Unit	1066 mm	840 mm	810 mm	Clark
Reach @45° Dump Angle, 7' Clear	1524 mm		1295 mm	1092 mm	1220 mm	
Breakout Force	5470 kg		5615 kg	6144 kg	6395 kg	
Tipping Load - Straight	4956 kg**		5606 kg**	4570 kg Δ	5580 kg**	
Tipping Load - 35°	4439 kg**		4819 kg**	4327 kg	5113 kg**	
Tipping Load - 40°	4288 kg**		4643 kg**	—	—	
Tipping Load - 45°	—		—	—	—	
Approx. Operating Weight	7298 kg**		7827 kg**	7103 kg Δ	8614 kg**	
Dimensions						
Machine Hgt. over ROPS	3048 mm	3073 mm	3105 mm	3020 mm	3120 mm	3048 mm
Tire Tread (Std. Tires)	1727 mm	1753 mm	1745 mm	1650 mm	1850 mm	1753 mm
Width over Tires	2134 mm	2172 mm	2159 mm	2030 mm	2260 mm	2121 mm
Ground Clearance	406 mm	432 mm	387 mm	381 mm	—	368 mm
Overall Length-Bucket on Ground	5588 mm	6121 mm	5522 mm	5796 mm	5700 mm	5933 mm
Wheelbase	2540 mm	2540 mm	2451 mm	2337 mm	2540 mm	2540 mm
Steering System						
Type	Hydrostatic	Hydrostatic	Hydrostatic	Hydraulic Power	Hydraulic Power	Hydraulic Power
Steering Pump Type	Gear	Gear	Gear	Gear	Vane	Gear
Steering Cylinders	2 = 63.5x358 mm	2 = 63.5x358 mm	2 = 50 x 455 mm	INA	INA	2 = 63.5x330.2mm
Pump Capacity	79.5 lit/min @2200 rpm @13.8 kPa	79.5 lit/min @2200 rpm @13.8 kPa	Combined w/ Ldr. Pump	53 lit/min @2400 rpm @17.2 kPa	96 lit/min @2200 rpm @6.8 kPa	104.5lit/min@2400 rpm @11.0 kPa
Type Articulation	Center Pivot	Center Pivot	Center Pivot	Center Pivot	Center Pivot	Non Center Pivot
Loader Hydraulic System						
Type	Closed, Positive Air Pressurized	Closed, Positive Air Pressurized	INA	Sealed	Sealed	Closed Pressurized
Cylinders - Lift	2 = 114 x 645 mm	2 = 114 x 645 mm	2 = 110 x 690 mm	2 = 102 x 606 mm	2 = 108 x 780 mm	2 = 101.6x680 mm
Cylinders - Bucket	2 = 76 x 775 mm	2 = 76 x 775 mm	1 = 110 x 495 mm	2 = 76 x 555 mm	2 = 102 x 442 mm	2 = 88.9x655.3mm
Pump Type	Gear	Gear	Gear	Dual Stage Gear	INA	Gear
Pump Capacity	129 lit/min @2200 rpm @15.2 kPa	129 lit/min @2200 rpm @15.2 kPa	112 lit/min @2500 rpm @16.2 kPa	85 lit/min @2200 rpm @17.2 kPa	126 lit/min @2200 rpm @6.8 kPa	104.5lit/min@2400 rpm @11.0 kPa
Control Valve	2 Spool	3 Spool	2 Spool	2 Spool	2 Spool	2 Spool
Raise Time	5.5 sec.	6.1 sec.	6.7 sec.	6.0 sec.	6.0 sec.	6.0 sec.
Lower Time	4.0 sec.	2.4 sec.	4.7 sec.	3.5 sec.	3.0 sec.	2.8 sec.
Dump Time	1.7 sec.	2.0 sec.	1.0 sec.	1.3 sec.	1.2 sec.	1.4 sec.

INA - Information Not Available.

*Tires used to calculate operating information and dimensions.

**Equipped with optional rear ctw.

***Rear tires filled with CaCl₂.

Δ Equipped with optional transmission.

□ Clark 35C government unit also offers the same G.M. engines available on the standard Clark 35C.

W14 and Competition (Metric) cont.

Manufacturer & Model	Clark 35C	Clark 35C Government	John Deere 444C	John Deere 444CH	Fiat Allis FR7	Fiat Allis 345B
Operating Information Cont.						
Tipping Load - 35°	4374 kg**	5231 kg**	5498 kg**	5498 kg**	—	4915 kg**
Tipping Load - 40°	—	—	5301 kg**	5301 kg**	3760 kg**	4732 kg**
Tipping Load - 45°	—	—	—	—	—	—
Hydraulic Lift Capacity @Ground	INA	INA	8255 kg	8255 kg	INA	INA
Hydraulic Lift Capacity @Full Hgt.	INA	INA	3425 kg	3425 kg	INA	INA
Turn Radius over Bucket	5486 mm	5486 mm	4877 mm	4877 mm	5200 mm	4898 mm
Approx. Operating Weight	8042 kg**	8545 kg**	8358 kg**	8358 kg**	6920 kg**	7661 kg**
4-IN-1 Bucket						
Bucket - m ³	Not	.96 m ³	1.15 m ³	1.15 m ³	.86 m ³	.96 m ³
Max. Dump Clear @45°	Available	2654 mm	2580 mm	2580 mm	2670 mm	2733 mm
Bottom Dump Clear @45°	Thru	INA	INA	INA	INA	INA
Fwd. Dump Reach @45° Discharge	Clark	914 mm	847 mm	847 mm	980 mm	1156 mm
Reach @45° Dump Angle, 7' Clear		1448 mm	1210 mm	1210 mm	1525 mm	1705 mm
Breakout Force		5969 kg	6640 kg	6640 kg	6160 kg	5987 kg
Tipping Load - Straight		5143 kg**	5114 kg**	5114 kg**	3945 kg**	4930 kg**
Tipping Load - 35°		4680 kg**	4548 kg**	4548 kg**	—	4342 kg**
Tipping Load - 40°		—	4364 kg**	4364 kg**	3525 kg**	4171 kg**
Tipping Load - 45°		—	—	—	—	—
Approx. Operating Weight		9044 kg**	8788 kg**	8788 kg**	7120 kg**	7666 kg**
Dimensions						
Machine Hgt. over ROPS	3048 mm	3048 mm	3020 mm	3020 mm	2900 mm	2965 mm
Tire Tread (Std. Tires)	1753 mm	1753 mm	1720 mm	1720 mm	1620 mm	1778 mm
Width over Tires	2121 mm	2159 mm	2170 mm	2170 mm	2000 mm	2207 mm
Ground Clearance	368 mm	368 mm	387 mm	387 mm	350 mm	380 mm
Overall Length-Bucket on Ground	5933 mm	6096 mm	5790 mm	5790 mm	5800 mm	5516 mm
Wheelbase	2540 mm	2540 mm	2400 mm	2400 mm	2350 mm	2438 mm
Steering System						
Type	Hydraulic Power	Hydraulic Power	Hydraulic Power	Hydraulic Power	Hydraulic Power	Hydrostatic
Steering Pump Type	Gear	Gear	Piston	Piston	Gear	Gear
Steering Cylinders	2 = 63.5 x 330.2 mm	2 = 63.5 x 330.2 mm	2 = 76 x 400 mm	2 = 76 x 400 mm	2 = 65 x 302 mm	2 = 76 x 493 mm
Pump Capacity	104.5lit/min @2400 rpm @11.0 kPa	104.5lit/min @2400 rpm @11.0 kPa	78 lit/min @1800 rpm @13.8 kPa	78 lit/min @1800 rpm @13.8 kPa	Combined w/ Ldr. Pump	44 lit/min @2500 rpm @16.2 kPa
Type Articulation	Non Center Pivot	Non Center Pivot	Non Center Pivot	Non Center Pivot	Center Pivot	Center Pivot
Loader Hydraulic System						
Type	Closed Pressurized	Closed Pressurized	Sealed	Sealed	Sealed	Closed/Pressure & Vacuum Relief
Cylinders - Lift	2 = 101.6 x 680 mm	2 = 101.6 x 680 mm	2 = 133 x 565 mm	2 = 133 x 565 mm	2 = 100 x 717 mm	2 = 102 x 798 mm
Cylinders - Bucket	2 = 88.9 x 655.3 mm	2 = 88.9 x 655.3 mm	2 = 133 x 642 mm	1 = 133 x 642 mm	2 = 100 x 380 mm	2 = 76 x 914 mm
Pump Type	Gear	Gear	Gear	Gear	Gear	Gear
Pump Capacity	104.5lit/min @2400 rpm @11.0 kPa	104.5lit/min @2400 rpm @11.0 kPa	151 lit/min @2400 rpm @4.14 kPa	138.6lit/min @2200 rpm @4.14 kPa	115 lit/min @2400 rpm @7.0 kPa	114 lit/min @2500 rpm @16.2 kPa
Control Valve	2 Spool	2 Spool	2 Spool	2 Spool	3 Spool	2 Spool
Raise Time	6.0 sec.	6.0 sec.	5.8 sec.	6.3 sec.	5.4 sec.	6.5 sec.
Lower Time	2.8 sec.	2.8 sec.	4.0 sec.	4.0 sec.	1.3 sec.	3.4 sec.
Dump Time	1.4 sec.	1.4 sec.	1.6 sec.	1.6 sec.	3.0 sec.	2.9 sec.

W14 and Competition (Metric) cont.

Manufacturer & Model	Ford A-62	Furukawa FL120A	I.H. 510B	Kobelco LK300A	Komatsu W40-2	Owatonna 880
Operating Information Cont.						
Tipping Load - 35°	6022 kg**	—	—	—	—	—
Tipping Load - 40°	5861 kg**	4690 kg	4062 kg**	4200 kg**	4400 kg	3629 kg***
Tipping Load - 45°	5689 kg**	—	—	—	—	—
Hydraulic Lift Capacity @Ground	INA	INA	5566 kg Carry Position	INA	5990 kg Carry Position	INA
Hydraulic Lift Capacity @Full Hgt.	INA	INA	INA	INA	INA	3402 kg
Turn Radius over Bucket	4547 mm	4930 mm	4928 mm	4880 mm	4915 mm	4724 mm
Approx. Operating Weight	9072 kg**	7452 kg	6599 kg**	6600 kg**	6781 kg	6804 kg***
4-IN-1 Bucket						
Bucket - m³	Not	1.0 m³	.96 m³	1.0 m³	1.0 m³	INA, But
Max. Dump Clear @45°	Available	2765 mm	2640 mm	INA, But	2495 mm	Owatonna Offers
Bottom Dump Clear @45°	Thru	INA	INA	Kobelco Offers	INA	One in Their
Fwd. Dump Reach @45° Discharge	Ford	905 mm	930 mm	One in Their	970 mm	Price List
Reach @45° Dump Angle, 7' Clear		1105 mm	1320 mm	Price List	1225 mm	
Breakout Force		6110 kg	6314 kg		6830 kg	
Tipping Load - Straight		5052 kg	4546 kg**		4636 kg	
Tipping Load - 35°		—	—		—	
Tipping Load - 40°		4423 kg	3865 kg**		3937 kg	
Tipping Load - 45°		—	—		—	
Approx. Operating Weight		8178 kg	6923 kg**		7181 kg	
Dimensions						
Machine Hgt. over ROPS	3120 mm	2955 mm	3100 mm	2960 mm	INA	2921 mm
Tire Tread (Std. Tires)	1740 mm	INA	1820 mm	1750 mm	1780 mm	1702 mm
Width over Tires	2172 mm	INA	2290 mm	2190 mm	2220 mm	2134 mm
Ground Clearance	381 mm	375 mm	410 mm	400 mm	400 mm	406 mm
Overall Length-Bucket on Ground	5791 mm	5870 mm	5480 mm	5590 mm	5420 mm	5550 mm
Wheelbase	2616 mm	2400 mm	2438 mm	2440 mm	2440 mm	2083 mm
Steering System						
Type	Hydraulic Power	Hydraulic Power	Hydrostatic	Hydraulic Power	Hydraulic Power	Hydraulic Power
Steering Pump Type	Gear	Gear	Gear	Gear	Gear	INA
Steering Cylinders	2 = 76 x 430 mm	2 = ? x ?	2 = 76 x 411 mm	2 = 50 x 390 mm	2 = 80 x 413 mm	INA
Pump Capacity	49.2lit/min @2100 rpm @ 17.4 kPa	Combined w/ Ldr. Pump	INA	60 lit/min @2400 rpm @ 15.0 kPa	INA	45.5lit/min @2450 rpm @ 11.0 kPa
Type Articulation	Center Pivot	Center Pivot	Center Pivot	Center Pivot	Center Pivot	Non Center Pivot
Loader Hydraulic System						
Type	Pressurized	Sealed	Closed with Pressure Control	Closed and Pressurized	Sealed	INA
Cylinders - Lift	2 = 114 x 669 mm	2 = 100 x 645 mm	2 = 102 x 559 mm	2 = 100 x 560 mm	2 = 110 x 560 mm	INA
Cylinders - Bucket	1 = 140 x 684 mm	1 = 90 x 505 mm	1 = 102 x 445 mm	2 = 75 x 620 mm	1 = 100 x 444 mm	INA
Pump Type	Gear	Gear	Gear	Gear	Gear	Gear
Pump Capacity	128.8lit/min @2100 rpm @ 17.4 kPa	130 lit/min @2200 rpm @ ? kPa	93 lit/min @2500 rpm @ 20.7 kPa	83 lit/min @2400 rpm @ 21.0 kPa	120 lit/min @2500 rpm @ 20.6 kPa	105.9lit/min @2450 rpm @ 11.0 kPa
Control Valve	2 Spool	2 Spool	2 Spool	2 Spool	2 Spool	2 Spool
Raise Time	6.0 sec.	INA	5.9 sec.	5.8 sec.	INA	7.0 sec.
Lower Time	3.2 sec.	INA	4.5 sec.	2.4 sec.	INA	5.0 sec.
Dump Time	1.3 sec.	INA	1.8 sec.	1.6 sec.	INA	2.5 sec.

INA - Information Not Available.

*Tires used to calculate operating information and dimensions.

**Equipped with optional rear ctw.

***Rear tires filled with CaCl₂.

△ Equipped with optional transmission.

□ Clark 35C government unit also offers the same G.M. engines available on the standard Clark 35C.

W14 and Competition (Metric) cont.

Manufacturer & Model	Terex 22C / 72-15	Trojan 1500Z
Operating Information Cont.		
Tipping Load - 35°	—	—
Tipping Load - 40°	4217 kg @37°	5867 kg @42°
Tipping Load - 45°	—	—
Hydraulic Lift Capacity @Ground	INA	INA
Hydraulic Lift Capacity @Full Hgt.	5500 kg	INA
Turn Radius over Bucket	4880 mm	5121 mm
Approx. Operating Weight	6669 kg	7823 kg
4-IN-1 Bucket		
Bucket - m³	1.0 m³	1.1 m³
Max. Dump Clear @45°	INA, But	2698 mm
Bottom Dump Clear @45°	Terex Offers	INA
Fwd. Dump Reach @45° Discharge	One in Their	717 mm
Reach @45° Dump Angle, 7' Clear	Price List	1203 mm
Breakout Force		8505 kg
Tipping Load - Straight		5236 kg
Tipping Load - 35°		—
Tipping Load - 40°		4565 kg @42°
Tipping Load - 45°		—
Approx. Operating Weight		8232 kg
Dimensions		
Machine Hgt. over ROPS	3170 mm	3048 mm
Tire Tread (Std. Tires)	1490 mm	1752 mm
Width over Tires	1750 mm	2241 mm
Ground Clearance	530 mm	425 mm
Overall Length-Bucket on Ground	5400 mm	5994 mm
Wheelbase	2200 mm	3749 mm
Steering System		
Type	Hydraulic Power	Hydraulic Power
Steering Pump Type	Gear	Gear
Steering Cylinders	2 = 60 x 300 mm	2 = 63 x 391 mm
Pump Capacity	48 lit/min @2500 rpm @15 kPa	77 lit/min @2500 rpm @15.0 kPa
Type Articulation	Center Pivot	Center Pivot
Loader Hydraulic System		
Type	Closed and Pressurized	Sealed and Pressurized
Cylinders - Lift	2 = 100 x 600 mm	2 = 100 x 716 mm
Cylinders - Bucket	2 = 75 x 510 mm	2 = 120 x 455 mm
Pump Type	Gear	Gear
Pump Capacity	96 lit/min @2500 rpm @18 kPa	126 lit/min @2500 rpm @16.1 kPa
Control Valve	2 Spool	2 Spool
Raise Time	6.0 sec.	5.2 sec.
Lower Time	3.5 sec.	3.3 sec.
Dump Time	3.0 sec.	1.0 sec.



Note: All Case specifications are stated in accordance with ICED Definitions or SAE Standards or Recommended Practices, where applicable.

Important

J I Case Company reserves the right to change Case specifications without notice and without incurring any obligation relating to such changes.

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