

Standard Equipment

International D-358 diesel engine; soft-shift transmission; electrical starting and lighting system incl. traffic and directional signal lights; air cleaner, two stage, dry type, with service gauge; oil cooler, transmission-torque-converter oil; access ladder; filters, full flow for engine and hydraulic oil appr. half flow trans. and torque converter oil with cartridge type elements; hand throttle; horn; muffler; adjustable seat; tires: 18.4 x 24 ply 10; voltage regulator; alternator, 45 amp; batteries; two hydr. steering cylinders; mechanical parking brake (drum type); all-wheel hydr. foot brakes; two-spool hydr. valve; bucket (stockpile) 1.33 m³ (1.75 yd³) muffler, safety lock for loader and transmission controls.

Special Equipment:

Automatic boom kickout; bucket positioner; bucket teeth; hydraulic kit for multi-purpose bucket; no-spin differential; adj. hydr. suspension seat; hyd. 3-spool valve; heater and defroster; ROPS cab; sound suppression; rear wiper and washer; turn signal w/ hazard switch; tachometer; speedometer; air conditioning; cold weather starting aid; rear view mirror; sun visor; fenders; ground driven steering.

Special buckets; 1.15 m³ (1.5 yd³); 1.53 m³ (2.0 yd³)
 Optional tires: 17.5 x 25 ply 12 (L 2, L 3)
 14.0 x 25 ply 8 (G 2)

Gauges

Engine coolant temperature; engine oil pressure control lamp; converter oil temperature; fuel indicator; hourmeter; voltage meter;

Tires lb (kg)	Change in Operating Weight	Change in Full Turn Tipping Load
18.4 x 24—10 PR (R 4) std.	0	0
14.00 x 24— 8 PR (G 2) opt.	-115 (- 55)	- 75 (- 35)
17.5 x 25—12 PR (L-2) opt.	+580 (+265)	+365 (+165)
17.5 x 25—12 PR (L 3) opt.		
ROPS Cab add	+435 (200)	+200 (91)

Machine Dimensions, Approx.			
Tire Size	10 PR	12 PR	8 PR
	18.4 x 24 (R 4)	17.5 x 25 (L-2)	14.00 x 24 G 2
Tread—(m)	70" (1.78)	70" (1.78)	70" (1.78)
Width over Tires—(m)	89" (2.26)	87.5" (225.5)	85"(215.5)

Specifications subject to change without notice. Illustrations may not include all standard equipment. Fenders and cab are optional equipment.



INTERNATIONAL HARVESTER

International Harvester Company M.B.H. Neuss/Rhine and Heidelberg



**International
PAY LOADER**

515

**New in Power, Performance,
Economy and Style**

- High performance, 6-cylinder diesel engine developing 72 kW (98 DIN PS) at 2,500 rev/min.
- Articulated finger-tip power steering.
- 3-speed full reversing "SOFT SHIFT" transmission.
- Single-stage, single-phase torque converter with stall ratio of 2.85 : 1.
- Closed pressure hydraulic system with single gear-type pump.
- Big capacity bucket 1.33 m³ (1.75 yd³)
- High dumping clearance 2760 mm (9'-0")
Extra-long reach 980 mm (3'-2 1/2")
- Fast, effortless hydraulic control — boom raises in 6 seconds, lowers in 4 seconds.
- Four-wheel, sealed, wet-type hydraulic disc brakes. Independent mechanical handbrake.
- Sight gauges for easy maintenance. Sealed pivot points with extended lubrication intervals.
- Excellent panoramic visibility, conveniently located controls plus unmatched comfort and unique styling.

Bucket capacity, m ³ (yd ³)	1.33 (1.75)
Tipping load, kg (lb)	5813 (12815)
in full turn position, kg (lb)	4940 (10890)
Maximum lift, at SAE Carry, kg (lb)	4053 (14235)
Operating weight, kg (lb)	7399 (16312)
Breakout force, kg (lb)	6890 (15200)

Engine

Make and model		International D-358
Type — 4 cycle diesel, direct start, direct injection		
Net output, Din 70020 kW (PS)	72 (98)	
governed speed, s/1 (rev/min)	41.7 (2500)	
Max. torque:		
Nm (mkp)	340.5 (34.7)	
ft lbf	251	
at speed, s/1 (rev/min)	30 (1800)	
Bore and stroke:		
mm	98.4 x 128.5	
in	3.874 x 5.039	
No. of cylinders		
Displacement:	6	
cm ³	5867	
in ³	358	
Compression ratio	16 : 1	

Electrical System

Batteries	2 x 12 V, 95 Ah
Alternator	28 V, 45 A 27
Starter, kW (hp)	24 V, 4.6 (6.3)

Torque Converter

Single phase, single stage; 2.85 to 1 stall ratio.

Transmission

Soft-shift, countershaft type, constant mesh. Full power soft-shift allows range and directional changes at full engine rev/min.

Speeds	forward		reverse	
	km/h	(mile/h)	km/h	(mile/h)
1.	0—7.2	(4.5)	0—7.3	(4.5)
2.	0—14.4	(8.9)	0—14.5	(9.0)
3.	0—37.3	(23.2)	0—37.3	(23.2)

Differentials

Conventional

Axles

Heavy-duty type axle shafts, spiral bevel gear differentials and inboard planetary. Four wheel drive. Front axle fixed, rear-axle oscillates a total of 24°.

Turning Radius

Outside corner bucket, mm (in)	5105 (201)
Outside rear wheel, mm (in)	4670 (183.9)

Hydraulic Steering

Articulated frame. Full hydraulic power (with mechanical follow-up). Closed center type providing instant flow to steering at any engine speed. Excess flow directed via steering valve to loader hydraulics.

Articulation, right or left 40°.

Brakes

Service	hydr. wheel disc brakes
Location	4-wheels
Parking	mechanical
Location	forward input shaft
Inboard mounted wet disc with separate axle by axle operation and warning indicator light and buzzer. Operator's choice braking left pedal neutralizes transmission and applies brakes, right pedal applies brakes only.	

Hydraulic System

Type: Closed with pressure control 2 kg/cm² (28 lb in²) and vacuum relief. Single pump for loader and steering hydraulics provides multiple operations by means of pressure compensated steering valve. Two steering cylinders: bore/stroke 7.6 x 41 cm. Raise boom in 5.8 sec. Lower boom in 3.6 sec.

Reservoir: Integrated in bulk head with separate filter for full return flow filtering, suction screen, sight gauge.
Pump: Single gear type, driven from accessory drive.
Valve: Two-spool with relief valve. Opt. three-spool.
Relief valve pressure (3000 psi) 20.7 MPa
Cylinders (double acting): hardened chrome plated piston rods.

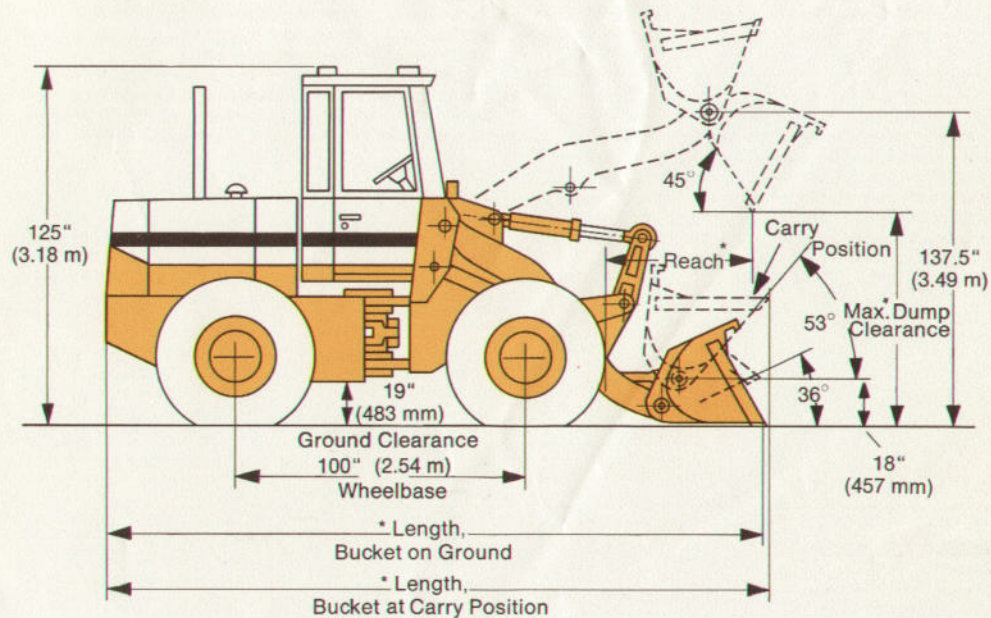
Boom — bore and stroke (2)	11.4 x 55.9 cm (4.5" x 22")
Bucket — bore and stroke (1)	11.4 x 55.9 cm (4.5" x 22")
Steering — bore and stroke (2)	7.6 x 41 cm (3.0" x 16.2")

Hydraulic Controls

Boom Positions: raise, hold, down pressure and float.
Bucket Positions: roll back, hold and dump.

Service Capacities (approx.)

Cooling system	ltr.	(gal)
Lube systems:	34	(9.0)
Crankcase	14	(3.7)
Transmission/Torque converter	17	(4.5)
Differential and final drive, front	15	(4.2)
Differential and final drive, rear	15	(4.2)
Hydraulic system	38	(10.0)
Fuel tank	132.5	(35.0)



Dimensions Vary with Bucket Size — Refer to Chart Below

BUCKET TYPE

	General Purpose	Stockpile	Stockpile
SAE Bucket	Rated — m ³ (yd ³)	1.15 (1.5)	1.53 (2.0)
Capacity	Struck — m ³ (yd ³)	0.99 (1.3)	1.30 (1.7)
Width — mm (in)		2388 (94)	2388 (94)
Max. Mat'l Weight	Excavating	1780 (3000)	1525 (2570)
kg/m ³ — (lb/yd ³)	Stockpile	2136 (3600)	1830 (3085)
Static Tipping	Straight	5840 (12875)	5813 (12815)
** Load — kg (lb)	Full Turn	4965 (10945)	4911 (10825)
** Basic Operating Weight	kg (lb)	7331 (16162)	7399 (16312)
+ Dump Clearance, Max. Height and 45°			
Dump Angle — mm (in)		2820 (111)	2760 (108.5)
+ Reach at 7' Cut Edge Clearance and 45°			
Dump Angle — mm (in)		1320 (52)	1360 (535)
+ Reach at Max. Height and 45°			
Dump Angle — mm (in)		5360 (211)	980 (38.5)
* Overall Length, Bucket on Ground—mm (in)		930 (36.5)	5650 (222.5)
* Overall Length, Bucket Carry — mm (in)		5690 (224)	5740 (226)
Turning Radius, Outside Corner of Bucket — mm (in)		5080 (200)	5110 (201)
Lifting Capacity at SAE Carry — kg (lb)		6541 (14420)	6457 (14235)
Breakout Force — kg (lb)		7760 (17100)	6890 (15200)

+ Increases or decreases according to tire size - Refer to Machine Dimensions.

* Bucket teeth length not taken into consideration.

** Machine stability and weight can be increased for stockpile loading by adding larger tires, ballast or counterweights; proper selection of optional equipment for optimum machine performance is dependent upon material weight and operating conditions.