

SKID STEER 18





# Agile, Versatile and Reliable... the Perfect Power Source

Quality performance and maximum utilization are certain with Case 1818 and 1825 Uni-Loader<sup>®</sup> skid steers. Designed and built for rugged, daily use in a variety of jobsite settings, they can be equipped for loading, material handling, digging...and with hefty horsepower and load capacity, the 1818 and the 1825 have the power to get the work done.

At the same time, operator-friendly controls provide accurate maneuvering around obstacles. These handy units offer the size and agility for operating both indoors and out.

You can depend on these Case skid steers convenient maintenance features and built-in reliability keep them on the job producing.









	1818		1825
	Gas	Gas	Diesel
Model	Onan P218	Nissan A12	Kubota V1100-B
Cylinders			
Bore/Stroke	3.25" x 2.88"	2.87" x 2.76"	2.83" x 2.76"
	(82.6 mm x 73 mm)	(73 mm x 70 mm)	(72 mm x 70 mm)
Displacement	47.7 in <sup>3</sup> (0.78 L)	71.45 in <sup>3</sup> (1.17 L)	69.5 in <sup>3</sup> (1.14 L)
Net power rating	18 hp* (13.4 kW)	25 hp** (18.6 kW)	25 hp** (18.6 kW)
ALL	@ 3600 rpm	@ 2800 rpm	@ 2800 rpm
Maximum torque	31.3 lb•ft* (42.4 N•m)	58 lb•ft** (79 N•m)	. 50.5 lb•ft** (68.4 N•m)
and a man second of	@ 2100 rpm	@ 2400 rpm	@ 1800 rpm

\* Per SAE J607 \*\* Per SAE J1349

## Engine

Both the 1818 and 1825 are powered by fuel–efficient engines. On the 1818 it's the Onan Performer 218 gas engine, while the 1825 offers a choice of a Nissan A12 gas or a Kubota V1100-B diesel all well-suited for the demands put on the skid steers.

Cooling systems — To maintain proper engine temperatures, the 1818 gas engine is air cooled and has an engine oil temperature sensor. Both engine options for the 1825 are liquid cooled.

Cold starts — On the 1818, a control lever disengages the hydrostatic transmission to lessen the load on the starter during cold starts; the 1825 diesel comes with glow plugs that heat the air in the precombustion chambers; additionally, block heaters are available for both 1825 engines. 4 Cylinders — Whichever engine you go with on the 1825, operation will benefit from a 4-cylinder design. Both engines run smoothly and quietly and with minimal vibration.

#### ELECTRICAL

	1818	18	1825	
	Gas	Gas	Diesel	
Voltage	12 volts	12 volts	12 volts	
Alternator	20 amp	35 amp	25 amp	
Battery	(1) 12-volt	(1) 12-volt	. (1) 12-volt	
	491 CCA	491 CCA	491 CCA	



## Hydrostatic Ground Drive

The hydrostatic ground drive on both the 1818 and 1825 supplies smooth steering and precise, low-effort control along with easy maintenance features.

#### TIRE OPTIONS 1818 & 1825

Type (tubeless)	Tread	Ply rating
5.70 x 15 (reversible)	Chevron	
27-8.50 x 15	Lug-type	
27-8.50 x 15	Heavy-duty I	ug-type 6

#### AXLE DRIVE CHAINS

1818 ..... No. 60 HT 1825 ..... No. 60 HT Power to the wheels — A low percentage of available engine power is required by the equipment hydraulics, so the majority is left in reserve for the hydrostatic drive.

Transmission pumps — Two tandem variable displacement piston pumps deliver oil to corresponding hydrostatic motors for independent control of each side. On the 1825, pumps are driven directly off the engine flywheel; no adjustment needed.

Hydrostatic motors — Motors mounted on the left and right side chain tanks smoothly convert the hydraulic energy from the pumps into mechanical torque at the motor output shaft.

Chain drive design — Each motor powers a tandem sprocket that drives two continuous chains, one each for the front and the rear axles. Quick and easy external adjustment for chain tension enhances drive longevity. Responsive and accurate — Hydrostatic drive employs hand levers for smooth, non-fatiguing control of direction and speed. They are designed for precision operation in tight areas.

Counter-rotation — These units can spot-turn within their own length. Operating space requirements are very low, and there is little lost motion in the cycle.

Infinitely variable speeds — Discover smooth speed transitions within a range of 0-4.5 mph (0-7.2 km/h) on the 1818 and 0-4.6 mph (0-7.4 km/h) on the 1825.

Dynamic braking — Moving the hand controls to the neutral position brings the unit to an even stop. Engage the mechanical parking latch by raising the seat bar.



### **Operator Environment**

Great visibility is combined with responsive controls and technically advanced instrumentation in this efficient work space.

Operator's compartment — Grab rails and a step assist when stepping in or out of the unit. A backrest extension is available, and a two-inch seat belt is standard.

Operator restraint — the seat bar is an additional restraining device and arm rest. When in the raised position, the seat bar automatically engages the parking latch and locks the loader lift arms and bucket controls.

Precision "hands-only" controls — Speed, direction and loader functions are all controlled by two

> low-effort hand levers. Hand controls are very operator friendly and leave ample room for the operator's feet.

Optional auxiliary hydraulic control — A foot pedal allows smooth feathering or partial flow for precision applications, or continuous hydraulic flow to the attachments as required.

Excellent visibility — Sturdy ROPS provides protection yet allows a wideopen view to the loader and surrounding work areas.

Engine air flow — Both engine intake air and exhaust are directed away from the operator's area for cleaner, more comfortable working conditions.

Monitoring systems — Visual and audible warnings alert the operator to the status of machine functions. Both models have hourmeters, and the 1825 features a "systems normal" light.



#### 1818 -

Warning lights for:

- Battery voltage
- Hydraulic filter
- Engine oil pressure
- (buzzer)
- Engine oil temperature
- Air filter indicator
- Fuel level (optional)



#### 1825 (gas & diesel)

Warning alarms and lights for:

- Charge pressure
- Engine oil pressure
- Engine coolant temperature
- Hydraulic oil temperature
- Seat belt
- Battery voltage

Warning lights for:

- Fuel level
- Hydraulic filter
- Air filter indicator



# **Hydraulics**

Loader and attachment work are handled with ease as a result of the large hydraulic capacities and excellent cooling capabilities on the 1818 and the 1825. Hydraulic pump — Highcapacity equipment pump responds quickly to loader and attachment demands. The 1818 pump is beltdriven off of the engine crankshaft, and the 1825 pump is direct driven in tandem with the hydrostatic pumps.

Big reservoir — A steel oil tank is located in the right-hand upright. Large volume means oil cycles through the system at a low frequency. This results in cooler oil and component temperature to enhance system durability. Efficient cooling — Large capacity hydraulic oil cooler is located within the rear compartment to utilize the engine fan air flow for maximum heat dissipation.

Two systems — Oil for the hydraulic system is kept separate from oil for the chains and sprockets. Oil stays cleaner so it lasts longer, and maintenance and overall operating costs are reduced.

Auxiliary hydraulics — Located on the loader arms for quick coupling of attachments, optional auxiliary hydraulics increase the skid steer's versatility.

#### HYDRAULIC CYLINDERS 1818 & 1825

 Bore
 Stroke
 Rod

 Lift (2)
 2.0" (51 mm)
 27.0" (686 mm)
 1.0" (25 mm)

 Tilt (2)
 2.0" (51 mm)
 13.1" (333 mm)
 1.0" (25 mm)

#### HYDRAULIC SYSTEM

#### 1818 -

Fliter	IU-micron spin-on
	w/bypass valve
Pump	Belt-driven from engine crankshaft
1825 -	
Filter	
	w/bypass valve
Pump	In tandem w/hydrostatic pumps

1818

1825

9.3 gpm @ 2800 rpm @ 2300 psi (35.2 L/min @ 2800 r/min @ 15 900 kPa)

> 2300 psi @ 120° F @ 15 gpm (15 900 kPa @ 49° C) (56.8 L/min)

### 9 gpm @ 3000

9 gpm @ 3000 rpm @ 1800 psi (34 L/min @ 3000 r/min @ 12 400 kPa) Main Relief Setting

1750 psi @ 120° F @ 15 gpm (12 100 kPa @ 49° C) (56.8 L/min)

### Frame/Loader

Rigorous daily usage demands a machine with great structural integrity. The 1818 and 1825 have it — in the form of a heavy-duty frame with sturdy uprights and loader arms. In addition, their compact size and turning ability allow work in tight spaces. With quick coupling attachments and effective breakout forces, expect reliable, quality performance.

Strength and agility — Rugged construction of the frame, uprights and loader arms means the 1818 and 1825 can absorb the shock of heavy work; yet they're nimble enough to spot-turn within their own lengths.

1818 maneuverability — Just 35" (889 mm) wide and 70" (1.78 m) high, the 1818 can easily move in and out through 3' (914 mm) doorways to perform tasks in confined spaces.

1825 — Able to move under a 6' (1.83 m) overhang or doorway, the 44" x 70.1" (1.12 m x 1.78 m) 1825 has the strength and stability to handle heavy loads and the reach to place them in trailers and trucks.

Stability — You'll have a distinct advantage when loading trucks or working on slopes due to the skid steer's good weight distribution. For added stability when working on uneven surfaces, reverse the  $5.70 \times 15$  4PR tires for a 7" (178 mm) increase in the overall width.

Loader arms — Sturdy loader arms cycle fast and achieve the maximum in force, capacity and endurance. Breakout force — Two heavyduty lift cylinders work in tandem with dual bucket cylinders that are mounted on the loader arms for easy bucket filling.

4-point support — Dual bucket cylinders and two loader stop blocks mounted to the front of the main frame help spread digging forces evenly throughout the unit. Bucket corner load stress is minimized, so the loader arms and quick attachment coupler last a long time.

FFC coupler option — Fast interchange of equipment increases both versatility and productivity. No tools are required for easy mounting and dismounting of all Case attachments and compatible allied attachments.

LOADER PERFORMANCE SPECIFICATIONS			
	1818*	1825**	
	gas	gas & diesel	
Tipping Capacity, SAE rating	1,100 lb	1,600 lb	
	(499 kg)	(726 kg)	
Lift Capacity to Maximum Height	1,100 lb	1,600 lb	
	(499 kg)	(726 kg)	
Rated Operating Load, SAE rating	550 lb	800 lb	
	(249 kg)	(363 kg)	
Breakout force –			
Tilt cylinder	1,210 lb•ft	1,776 lb•ft	
	(5382 N)	(7900 N)	
Lift cylinder	1,530 lb•ft	1,650 lb•ft	
	(6806 N)	(7340 N)	
Cycle times w/rated loads -			
Raising time	4.8 sec	4.8 sec	
Lowering time	2.8 sec	2.8 sec	
Rollback time –			
(Dump to full rollback)	2.4 sec	2.4 sec	
Dump time	1.4 sec	1.5 sec	

\*1818 w/full fuel, 175 lb (80 kg) operator, 35" (889 mm) dirt bucket, 5.70 x 15 tires, ROPS and standard equipment.

\*\*1825 w/full fuel, 175 lb (80 kg) operator, 44" (1118 mm) dirt bucket, 5.70 x 15 tires, ROPS and standard equipment.



#### BUCKET SELECTION

Having the right bucket for the job can save time and boost productivity, so Case offers a variety. These sturdy buckets are built to last and have excellent fill and cleanout characteristics.

		SAE Struck	SAE Heaped	
Туре	Width	Capacity*	Capacity*	Weight
1818				- it is a second second
Dirt & utility	35" (889 mm)	. 3.82 ft <sup>3</sup> (0.11 m <sup>3</sup> )	4.93 ft <sup>3</sup> (0.14 m <sup>3</sup> )	115 lb (52 kg)
Dirt & utility	44" (1118 mm)	. 4.84 ft <sup>3</sup> (0.14 m <sup>3</sup> )	6.34 ft <sup>3</sup> (0.18 m <sup>3</sup> )	130 lb (59 kg)
1825				
Dirt & utility	44" (1118 mm)	. 4.84 ft <sup>3</sup> (0.14 m <sup>3</sup> )	6.34 ft <sup>3</sup> (0.18 m <sup>3</sup> )	130 lb (59 kg)
Dirt & utility	49" (1245 mm)	5.4 ft <sup>3</sup> (0.15 m <sup>3</sup> )	7.10 ft <sup>3</sup> (0.20 m <sup>3</sup> )	145 lb (66 kg)
4-in-1	49" (1245 mm)	5.5 ft <sup>3</sup> (0.16 m <sup>3</sup> )	7.30 ft <sup>3</sup> (0.21 m <sup>3</sup> )	365 lb (166 kg)
*Per SAE J742				



		1818	1825
Α.	Overall operating height	125.2" (3180 mm)	126.9″ (3224 mm)
В.	Height to bucket hinge pin	96.2" (2445 mm)	98.2" (2494 mm)
C.	Height to top of ROPS	70.1" (1780 mm)	70.1" (1780 mm)
D.	Height to bucket bottom w/bucket level,		
	loader arm fully raised (w/all buckets)	90.0" (2286 mm)	
Ε.	Overall length w/o attachment	85.0" (2159 mm)	
F.	Overall length w/bucket on ground	104.3" (2649 mm)	109.0″ (2768 mm)
G.	Dump angle at max. height	40°	40°
Н.	Dump height, loader arm at max. height 73.	.9″ (1877 mm) @ 40°	76.0" (1930 mm) @ 40°
J.	Reach, fully raised	29″ (737 mm)	
K.	Reach, attachment on ground	42.2" (1072 mm)	42.2" (1072 mm)
L.	Max. rollback, attachment at full height	102°	
M.	Max. rollback, attachment on ground	27°	27°
N.	Wheelbase	30.4" (773 mm)	33.5″ (845 mm)
О.	Ground clearance	6.5″ (165 mm)	6.8″ (173 mm)
Ρ.	Clearance circle, front, less bucket	33.8″ (858 mm)	
R.	Clearance circle, front, w/attachment		
	Dirt buckets 35" (889 mm)	60.0" (1525 mm)	NA
	44" (1118 mm)	61.5" (1563 mm)	62.8" (1596 mm)
	49" (1245 mm)	NA	
S.	Clearance circle, rear	49.1" (1248 mm)	52.2" (1326 mm)
Τ.	Overall width w/5.70 x 15 tires	35.0″ (889 mm)	
	w/5.70 x 15 tires, reversed	41.9" (1064 mm)	
	w/27 - 8.50 x 15 tires	43.0" (1092 mm)	
U.	Tread width, centerlines		
	w/5.70 x 15 tires	29.1" (738 mm)	
	w/5.70 x 15 tires, reversed	36.0" (914 mm)	40.3" (1024 mm)
	w/27 - 8.50 x 15 tires	33.4" (848 mm)	
Ope	erating weight**	2,593 lb (1179 kg)	3,092 lb (1402 kg) - gas
			3,158 lb (1432 kg) - diesel

\*All dimensions taken with dirt buckets.

\*\* All units have full fuel, 175 lb. (80 kg) operator, ROPS, standard equipment and 5.70 x 15 tires. 1818 w/35" (889 mm) dirt bucket, 1825 w/44" (1118 mm) dirt bucket.



Minimal downtime and reliable performance result in high-end productivity. The superior service and maintenance features on the 1818 and 1825 skid steers make this a reality.

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## Serviceability

Service ports — Service elements are divided among the rear door, uprights, under the front floor plate and under the lift arms to prevent crowding and for easy servicing.

Easy checks — Fuel fill, hydraulic oil check and fill, and air filter require no disassembly for servicing.

Swing-out door — Rear door opens with a latch, no bolts to remove, so maintenance time is minimal. Numerous checks can easily be performed via this swing-out door.

- Daily engine checks and minor engine service.
- Radiator and oil cooler clean and service.

Reservoirs - Steel hydraulic and fuel reservoirs are inside the loader uprights - no plastic tanks to crack, or to leak.

Wide-open — ROPS and operator's station unfasten and tilt forward to expose the engine, hydraulic hoses, hydrostatic pumps and motors. Loader arms are up and out of the way, permitting work from either side.

External chain adjustment -Checking and adjusting chain tension are accomplished through chain tank openings. Easy periodic servicing means you'll get the most life out of each chain drive.

#### SERVICE CAPACITIES

Cooling system	7.0 qt (6.6 L)*
Fuel tank	8.5 gal (32.2 L)
Hydraulic system (total)	7.5 gal (28.4 L)
Chain compartments (per side)	3.0 qt (2.8 L)
*1825 only	

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**NOTE:** All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.

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