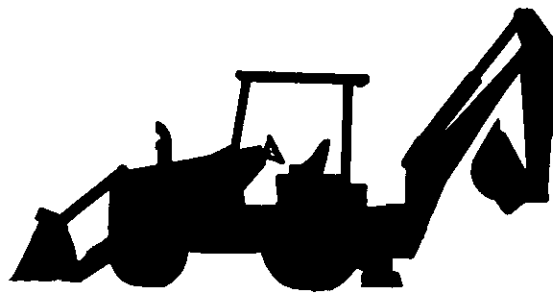


816B BACKHOE LOADER



The machine for extra profit. The 816B—its tough job capability and versatility make you money on a wide range of job applications.

The small 14'4" turning radius and hydrostatic steering get you around easily on congested job sites. A 4-speed synchromesh transmission and an 83 hp diesel engine make a perfect power-train match.

Other 816B features—like the 5000 lbs. loader lift capacity, the improved swing cushion, dual hydraulic pumps, integral main frame and dual lever backhoe controls—will improve your profit picture hour after hour, job after job.

- 13,100 LBS. DIGGING FORCE
- 16'3" DIGGING DEPTH
- 1¾ YD. LOADER BUCKET
- 51 DEGREE LOADER BUCKET ROLLBACK

BACKHOE LOADER





816B SPECIFICATIONS

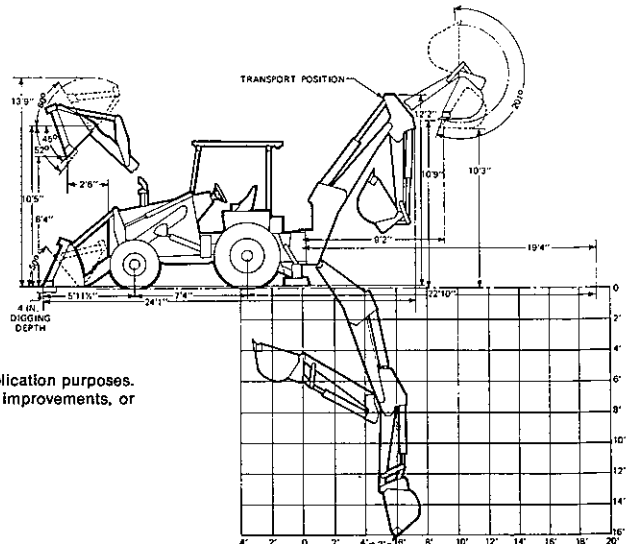
DRIVE TRAIN		Metrics
Engine		
Make	Perkins — Diesel with Direct Injection Combustion	
Net Horsepower IEMC	83 @ 2500 rpm	84.5 @ 2500 rpm
Piston Displacement	248 cu. in.	4.06 liters
Maximum Torque	200 ft.-lbs.	2780 kg cm
Number of Cylinders	4	
Bore & Stroke	3.975" x 5"	101 x 127 mm
Compression Ratio	16:1	
RPM Maximum Torque	1400	
Operating Range	750 to 2700 rpm	
Main Connecting Rod Bearing	Steel Backed Aluminum Tin Faced	
Main Bearing		
Number	5	
Diameter	3.015"/3.003"	76.243/76.276 mm
Length	1.245/Nos. 1, 2, 4, 5	31.623 mm
	No. 3/1.435"	36.449 mm
Lubrication	Pressure-Type Crankshaft-Driven Pump	
Cooling	Centrifugal Pump	
Fuel Injection Pump	Distributor Type	
Air Cleaner	Dry Type	
Electrical System	12V w/Alternator	
Starting	12V Electric Starter	
Transmission	4-speed Power Shuttle w/Torque Converter	
Torque Ratio	2.6:1	
Differential	Torque Proportioned	
Brakes — Service	Automotive-type expanding shoe hyd. actuated	
Brakes — Parking	Shoe-type transmission output shaft	
Steering	Hydrostatic 3 3/4 turns stop to stop	
	2" x 12" cylinder	50.8 x 304.8 mm
Turning Radius	14' 4" w/brake	4369 mm
Hydraulic System		
Pump	Dual gear type	
Loader/Backhoe System	25 gpm/15 gpm @ 2500 rpm	94.0/56.7 liters/min
Steering & Brake System	Gear type 5.5 gpm @ 1000 rpm 1500 psi w/flow control	20.7 liters/min @ 1000 rpm 105.4 kg/sq cm

816B CHASSIS — DIMENSIONS

Height top of steering wheel	78.65"	1998 mm
Overall height top of muffler	86.75"	2203 mm
Overall length	22' 8"	6909 mm
Overall width	84"	2120 mm
Wheelbase	88"	2235 mm
Tread Width		
Front	71"	1803 mm
Rear	67"	1702 mm
Ground Clearance	12.08"	306.8 mm
Standard Tires		
Front	11.00 x 16"	
Rear	16.9 x 24"	
Frame Weight	2700 lbs.	1227 kg
Frame	Integral Design	
Operating Weight	15,500 lbs.	7045 kg
Capacities		
Cooling System	4 gals.	15.1 liters
Fuel Tank	30 gals.	113.4 liters
Engine	7 qts.	6.6 liters
Transmission	4 qts. EP 90	11.3 liters
Differential	14 qts. Type A	13.2 liters
Hydraulic Loader Backhoe System	50 gals.	189 liters

816B LOADER		Metrics				
Lifting Capacity Full Height	5,000 lbs.	2273 kg				
Breakout Force	11,000 lbs.	5000 kg				
Maximum Height Bucket						
Hinge Pin	125"	3175 mm				
Clearance 45° Dump	100"	2540 mm				
Reach 45° Dump	31½"	800 mm				
Bucket Rollback Ground Level	51°					
Digging Depth Below Ground Level	4"	101.6 mm				
Operating Times:						
Raising Time	6 sec.					
Bucket Dump Time	2.5 sec.					
Lowering Time	2.4 sec.					
Control	Single Lever w/Float					
Hydraulic System						
Valve	Sectional Type					
Cylinders	Bore	Stroke	Rod Diameter			
Lift	4"	101.6 mm	22.9"	581.7 mm	2"	50.8 mm
Bucket	3"	76.2 mm	30"	762.0 mm	1¾"	4.4 mm
Packing	Teflon					
Self-Leveling Bucket						
Mechanical Linkage						
Loader Buckets: 1¼ yds.						.955 cu liter
1½ yds.						1.14 cu liter
1¾ yds.						1.34 cu liter

816B BACKHOE		Metrics				
Maximum Digging Depth	16' 3"	4953 mm				
IEMC Digging Depth	16'	4877 mm				
Reach Center Line Rear Axle	22' 10"	6950 mm				
Reach Center Line Swing Pivot	19' 4"	5893 mm				
Swing Arc	185°					
Loading Height	10' 3"	3124 mm				
IEMC Digging Force						
Crowd	9,450 lbs.	4295 kg				
Bucket	13,100 lbs.	5954 kg				
Bucket Rotation	143° to 201°					
Lift Capacity						
Boom & Dipper fully extended	2,000 lbs.	909 kg				
Transport Height	12' 2"	3708 mm				
Stabilizer Width						
Extended	10' 9"	3276 mm				
Retracted	6' 8"	2032 mm				
Hydraulic System						
Valve	Sectional Type					
Cylinders	Bore	Stroke	Rod Diameter			
Boom	5"	127.0 mm	37"	939.8 mm	2½"	63.5 mm
Crowd	5"	127.0 mm	37"	939.8 mm	2½"	63.5 mm
Bucket	4"	101.6 mm	31½"	800.1 mm	2½"	63.5 mm
Swing (Two)	3½"	88.9 mm	10¾"	273.0 mm	1½"	38.1 mm
Stabilizer (Two)	4"	101.6 mm	21¾"	552.4 mm	2"	50.8 mm
Packing	Teflon					
Backhoe Control	Two lever					
Operating Weight	15,500 lbs.					7045 kg
All measurements made with 24" bucket.						
Backhoe Buckets	18"	457.2 mm	5.76 cu. ft.			163 liters
	24"	609.6 mm	8.14 cu. ft.			232 liters
	30"	762.0 mm	10.3 cu. ft.			292 liters



The information contained herein is general in nature and is not intended for specific application purposes. Allis-Chalmers reserves the right to make changes in specifications shown herein, add improvements, or discontinue manufacture at any time without notice or obligation.



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