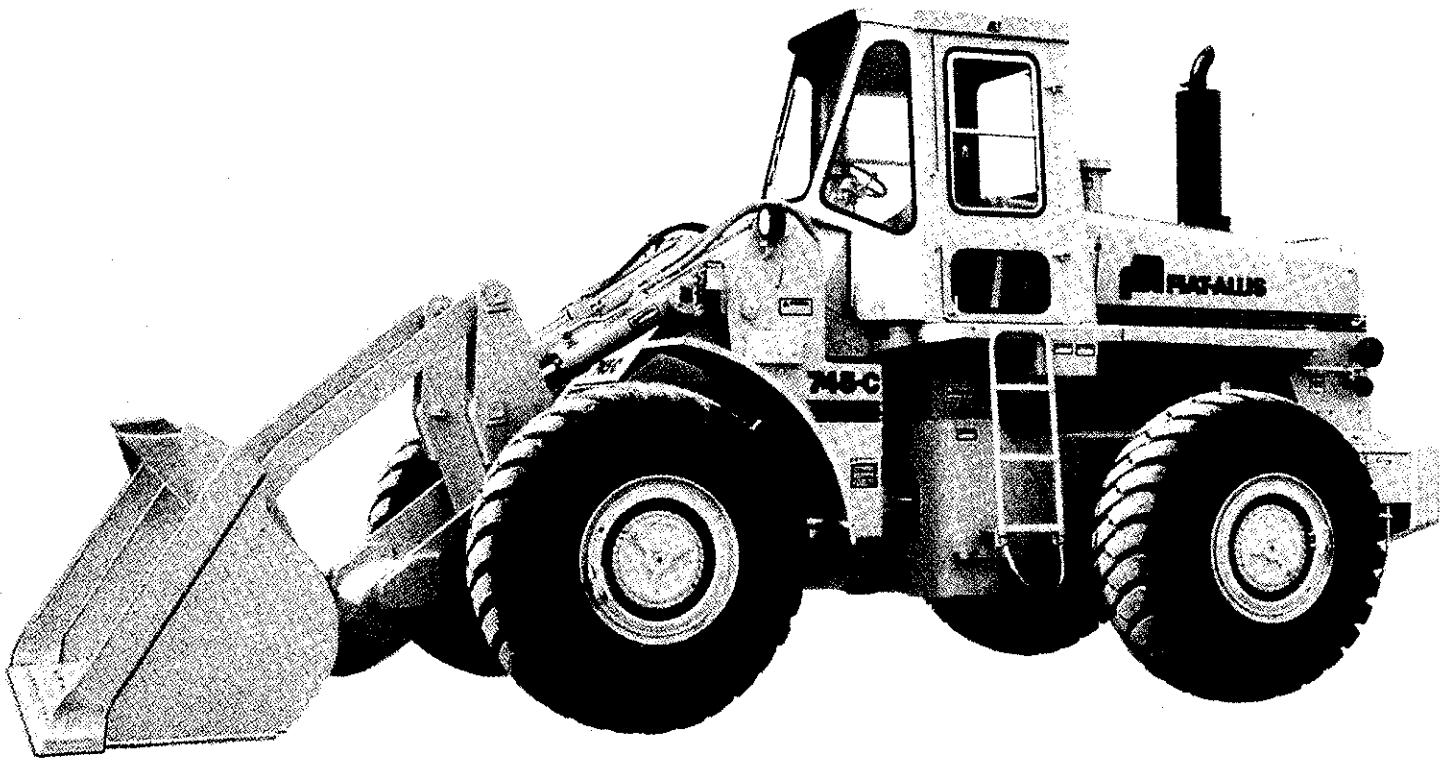


745-C



745-C
4 Cu. Yd. (3,1 m³) Wheel Loader

Illustration includes
optional equipment.

CAPACITY

- Full turn tipping load — 24,030 lbs. (10,900 kg)
- Breakout force — 36,220 lbs. (16,430 kg)
- Operating weight — 40,360 lbs. (18,300 kg)

STABILITY

- Long wheelbase, 130" (3302 mm)
- Wide tread, 87" (2210 mm)

SPEED

- SOF-SHIFT transmission, smooth, fast directional changes
- Twin-turbine torque converter, automatic crowd
- Single lever transmission control

POWER

- Allis-Chalmers model 11000 Mark II diesel engine
- Flywheel horsepower — 202
- Kilowatts — 151

LOADING ABILITY

- Ground level loading and carry
- Powerful, responsive hydraulics
- Torque proportioning differentials
- Automatic bucket positioner and lift kickout*
- *Optional equipment

SERVICEABILITY

- Disc brakes, quick change linings
- Easy ground level access to engine and transmission dipsticks, batteries and fuel tank.

DEPENDABILITY

- In-line straddle mounted linkage
- Rugged self-aligning pivot bearings
- Pin connected axles
- Total Quality Assurance reliability

MANEUVERABILITY

- 90° articulation, 17'9" (5410 mm) turning radius
- Demand steering, quick response at all engine speeds
- Wheels track

745-C SPECIFICATIONS



ENGINE

Make	Allis-Chalmers
Model	11000 Mark II turbocharged diesel
*Flywheel horsepower	202
**Kilowatts	151
Governed rpm	2200
Maximum torque	
ft.-lbs. @ rpm	575 ft.-lbs. @ 1600 rpm
kg-m @ rpm	79,5 kgm @ 1600 rpm
Bore & stroke	4.44" x 5.56" (112 x 141 mm)
Number of cylinders	6
Displacement	516 cu. in. (8,46 lit)

*Net flywheel horsepower available at the flywheel of the vehicle engine under SAE J816b standard conditions of 85°F (29°C) and 29.38" (746 mm) hg. after deductions have been made for Fan, Alternator, Compressor, Lube Oil Pump, Water Pump, Air Cleaner, Muffler and Fuel Pump. Engine will maintain specified flywheel horsepower up to 5,000 ft. (1520 m) altitude.

**The International System of Units for power, one (1) horsepower equals 0.746 kilowatts in U.S.A. units.



TORQUE CONVERTER

Type	Twin-turbine
Torque multiplication	4.62 to 1



TRANSMISSION

Type	Power shift planetary	
Forward speeds	mph	km/hr
1	2.4	3,8
2	5.3	8,5
3	9.2	14,8
4	20.0	32,1
Reverse speeds		
1	3.4	5,4
2	7.3	11,7

SOF-SHIFT transmission permits full power directional shift changes in low ranges for fast cycle time. Shift from 1st to 2nd and 3rd to 4th is automatic.



AXLES

Planetary reduction at wheel end. Axle shafts removable independent of wheel and brakes. Torque proportioning differentials. Axle housings pin-connected to loader frame. Rear axle oscillation

22°
Vertical travel



BRAKE SYSTEMS

Service — 4 wheel caliper disc type, air over hydraulic power, dual system.

Emergency — dash mounted lever actuates service brakes.
Parking — mechanically actuated drum brake on drive line.



TIRES

Type	Tubeless
Standard	23.5 - 25 (16 PR) L3
Optional	23.5 - 25 (20 PR) L2, L3, L4, L5 26.5 - 25 (20 PR) L2, L3



ELECTRICAL SYSTEM

Voltage	24V
Standard alternator	40 amp
Battery amp/hour rating	180
System protected by circuit breakers.	



LOADER HYDRAULIC SYSTEM

Type	Closed with pressure & vacuum relief
Cylinders	Double acting
Lift (2)	6.5" x 35.75" (165 x 908 mm)
Dump (2)	6.0" x 39.5" (152 x 1003 mm)
Pump	Gear type, tandem
Capacity @ governed rpm	95.0 gpm (359,6 lit/min)
Control valve	Two spool
Relief valve pressure	2000 psi (140 kg/cm ²)
Lift time	6.5 sec.
Lower time	4.6 sec.
Dump time	2.6 sec.



STEERING SYSTEM

Type	Hydraulic power*
Cylinders	Two, double acting
Bore & stroke	3.5" x 20.75" (89 x 527 mm)
Pump	Gear type
Capacity @ governed rpm	36.0 gpm (136,3 lit/min)

*With demand valve interconnection to loader hydraulic system, and mechanical follow-up linkage.



FILTRATION SYSTEMS

ENGINE	
Lube oil	Full flow 25 micron
Fuel	Full flow 5 micron w/water separator
Air cleaner	Dry type w/safety element
Coolant	Filter/conditioner
TRANSMISSION-TORQUE CONVERTER	
Oil	Full flow 25 micron
HYDRAULIC	
Oil	Full flow 25 micron
	Full flow magnetic
	Full flow wire mesh
Pressure-vacuum relief	40 micron element



CAPACITIES

ENGINE	
Lube oil	7.5 U.S. gal (28,4 lit)
Coolant	13.25 U.S. gal. (50,2 lit)
Fuel tank	85.0 U.S. gal. (321,8 lit)
TRANSMISSION	9.25 U.S. gal. (35,0 lit)
HYDRAULIC SYSTEM	57.0 U.S. gal. (215,8 lit)
AXLES	11.5 U.S. gal. (43,5 lit) each



STANDARD EQUIPMENT

● Air horn ● Anti-freeze ● Back-up alarm ● Brake system moisture ejector ● Bucket level indicator ● ROPS cab with tinted safety glass, front windshield wiper and headliner ● Drawbar with pin ● Pusher fan ● Fan finger guard ● Front and rear fenders ● Hydraulic oil cooler ● Boom lock ● Frame lock ● Transmission neutralizer ● Muffler ● Adjustable bucket seat ● Seat belt

● Gauges — air filter service indicator, air pressure, low air pressure warning light and buzzer, brake hydraulic failure warning light and buzzer, ammeter, torque converter oil temperature, engine oil pressure, engine coolant temperature, fuel level dipstick, hourmeter, hydraulic oil level, transmission oil pressure.

● Lighting — headlights (2), rear floodlights (2), rear stop and taillights (2), and dashlights (2).

PERFORMANCE DATA

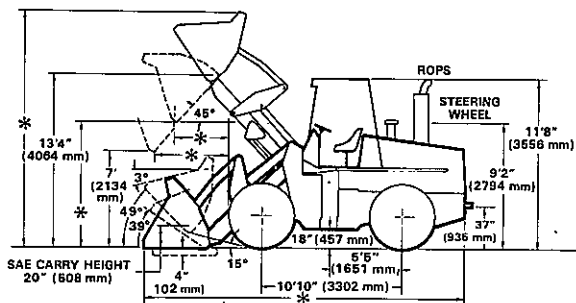
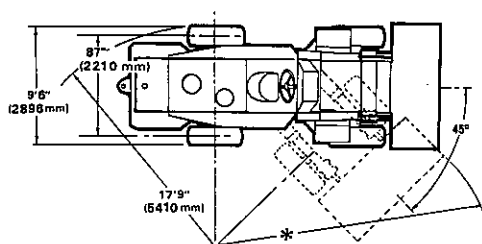
	U.S.A. UNITS			METRIC		
		General Purpose			General Purpose	
BUCKET CAPACITY RATED	3.5 cu. yd.	4.0 cu. yd.	4.5 cu. yd.	2,7 m ³	3,1 m ³	3,5 m ³
STRUCK CAPACITY	3.0 cu. yd.	3.4 cu. yd.	3.8 cu. yd.	2,3 m ³	2,6 m ³	2,9 m ³
BUCKET WEIGHT	3000 lbs.	3182 lbs.	3364 lbs.	1361 kg	1443 kg	1526 kg
BUCKET WIDTH	118"	118"	118"	2997 mm	2997 mm	2997 mm
DUMP HEIGHT @ 45°	10'4"	10'1"	9'11"	3150 mm	3073 mm	3023 mm
REACH @ 45°	33"	35"	38"	838 mm	889 mm	965 mm
REACH @ 45° 7 Ft. (2134 mm)	68"	69"	71"	1727 mm	1753 mm	1803 mm
OVERALL LENGTH (BUCKET ON GROUND)	23'10"	24'2"	24'4"	7264 mm	7366 mm	7417 mm
OVERALL HEIGHT (BUCKET RAISED)	17'1"	17'4"	17'8"	5207 mm	5283 mm	5385 mm
CLEARANCE CIRCLE (BUCKET @ CARRY)	39'8"	39'10"	40'0"	12,09 m	12,14 m	12,19 m
BREAKOUT FORCE	39,690 lbs.	36,220 lbs.	33,280 lbs.	18.000 kg	16.430 kg	15.095 kg
TIPPING LOAD						
0°	29,650 lbs.	29,190 lbs.	28,690 lbs.	13.445 kg	13.240 kg	13.010 kg
35°	26,420 lbs.	25,990 lbs.	25,510 lbs.	11.980 kg	11.785 kg	11.570 kg
40°	25,490 lbs.	25,060 lbs.	24,590 lbs.	11.560 kg	11.365 kg	11.150 kg
45°	24,450 lbs.	24,030 lbs.	23,570 lbs.	11,090 kg	10.900 kg	10.690 kg
OPERATING WEIGHT	40,180 lbs.	40,360 lbs.	40,540 lbs.	18.220 kg	18.300 kg	18.385 kg

OPTIONAL EQUIPMENT PERFORMANCE DATA	WEIGHT	TIPPING LOAD			
		0°	35°	40°	45°
		23.5 - 25 Tires with 75% CaCl ₂ in rear	+2400 lbs. +1090 kg	+3500 lbs. +1585 kg	+3130 lbs. +1420 kg
23.5 - 25 L4 Tires	+920 lbs. +417 kg	+980 lbs. +440 kg	+990 lbs. +450 kg	+990 lbs. +450 kg	+990 lbs. +450 kg
23.5 - 25 L5 Tires	+2120 lbs. +960 kg	+1980 lbs. +900 kg	+1920 lbs. +870 kg	+1890 lbs. +860 kg	+1870 lbs. +845 kg
26.5 - 25 L3 Tires	+1000 lbs. +454 kg	+895 lbs. +405 kg	+850 lbs. +385 kg	+840 lbs. +380 kg	+820 lbs. +375 kg
26.5 - 25 Tires with 75% CaCl ₂ in rear	+3230 lbs. +1465 kg	+4640 lbs. +2105 kg	+4120 lbs. +1865 kg	+3970 lbs. +1800 kg	+3800 lbs. +1725 kg
Less Counterweight	-1610 lbs. -730 kg	-3350 lbs. -1520 kg	-2860 lbs. -1295 kg	-2710 lbs. -1230 kg	-2560 lbs. -1160 kg
ROPS Canopy in lieu of ROPS Cab	-400 lbs. -180 kg	-310 lbs. -140 kg	-295 lbs. -133 kg	-290 lbs. -131 kg	-285 lbs. -129 kg
Less ROPS Cab	-1055 lbs. -480 kg	-910 lbs. -412 kg	-845 lbs. -383 kg	-825 lbs. -374 kg	-805 lbs. -365 kg

CHANGES IN DIMENSIONS	Vertical	Horizontal Reach
23.5 - 25 L4 or L5 Tires	+2.0" (+50 mm)	-1.2" (-30 mm)
26.5 - 25 L3 Tires	+2.7" (+70 mm)	-2.8" (-70 mm)

NOTE: All performance data and specifications are based on a standard unit equipped with 23.5 - 25 (16) L3 tires, ROPS cab, counterweight and bucket as indicated. All data is obtained in compliance with the latest SAE Recommended Practices including J732c and J742b.

DIMENSIONS



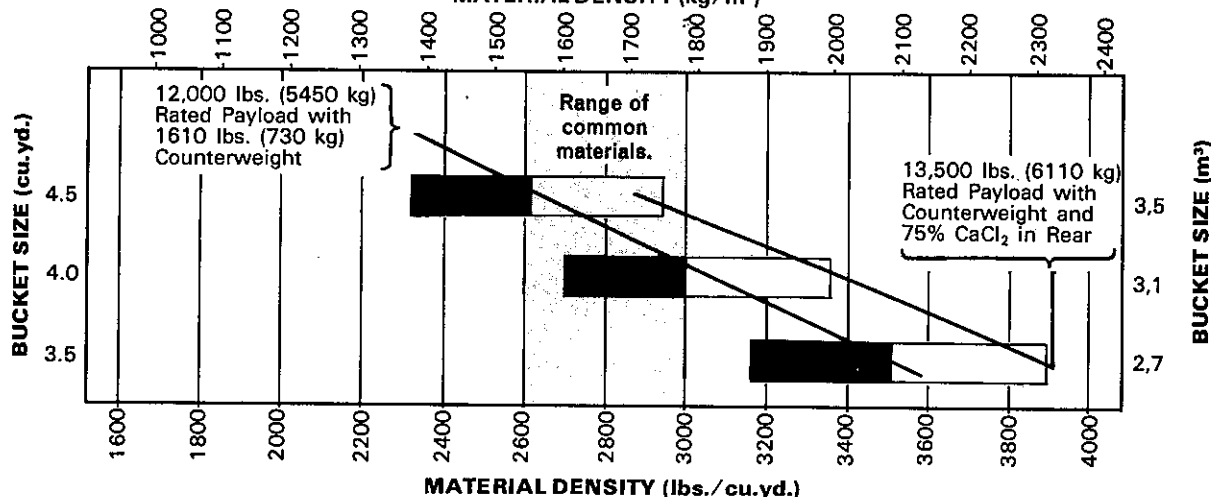
745-C

(* REFER TO PERFORMANCE DATA CHART

745-C BUCKET SELECTION CHART

SAE Operating Load, J818a

MATERIAL DENSITY (kg/m³)



Bucket recommendations shown above are based on a full SAE heaped load at the material density indicated. When selecting the proper bucket for a specific application, other factors must also be considered. These include loadability and heaping characteristics of the material, terrain and other pertinent job conditions.

OPTIONAL AND ALLIED EQUIPMENT

Alcohol injector, brake air system
 Alternator, 50 amp.
 Automatic bucket positioner
 Automatic lift kickout
 Buckets — special purpose:
 light material, rock,
 multi-purpose, tine, etc.
 Bucket equipment:
 Bolt-on reversible cutting edge
 Bolt-on spill plate extension
 Teeth with replaceable points

Cab equipment:
 Air conditioner
 Heater
 Defroster fans
 Rear windshield wiper
 Sound suppression
 Canopy, ROPS
 Counterweights, regular and logging
 Differential, *NoSPIN®, for front or rear
 Filter, by-pass engine oil
 Front piping
 Hood side panels
 Ladder, right side dual access
 Lift and tie-down eyes

Lights, auxiliary
 Log and lumber forks
 Rear axle disconnect
 Single lever hydraulic control
 Snow plows and wings
 Special paint
 Starting aid
 Steering knob
 Supplemental steering system
 Tires, special purpose and radial
 Tire inflator
 Tool kit
 Valve, 3-spool
 Vandalism protection

The dimensions, weights and capacities shown herein, as well as any conversion data used, are approximate only and are subject to variations within normal manufacturing techniques. Fiat-Allis reserves the right to make changes in specifications shown herein or add improvements at any time without notice or obligation. Illustrations show standard and optional items. *NoSPIN® is a registered trademark of Detroit Automotive Products Corporation.