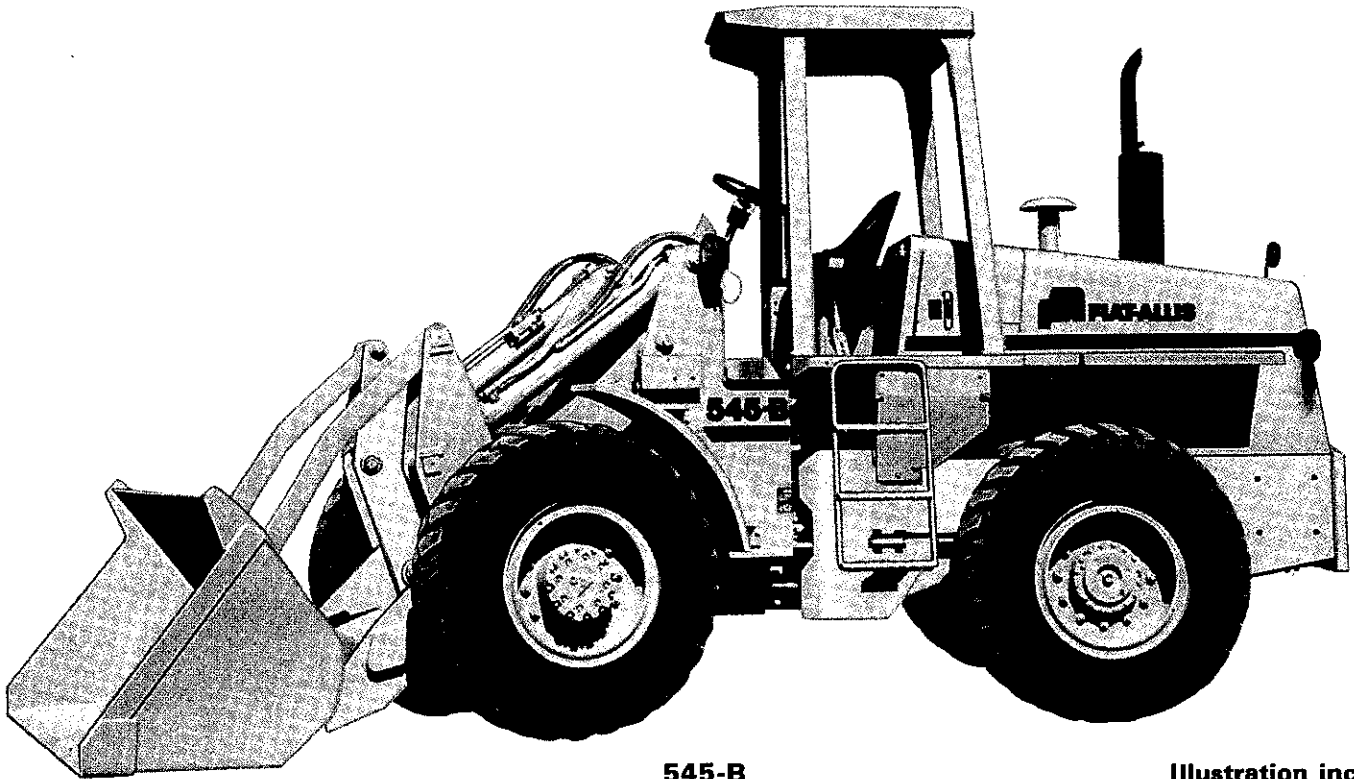


545-B



545-B
2.0 cu. yd. (1,5 m³) Wheel Loader

Illustration includes optional equipment.

CAPACITY

- Full turn tipping load — 12,070 lbs. (5474 kg)
- Breakout force — 21,430 lbs. (9721 kg)
- Operating weight — 20,290 lbs. (9200 kg)

STABILITY

- Long wheelbase, 110" (2794 mm)
- Wide tread, 73" (1840 mm)

SPEED

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

POWER

- Allis-Chalmers 2900 Mark II diesel engine
- Flywheel horsepower — 102
- Kilowatts — 76

LOADING ABILITY

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

*Optional equipment

SERVICEABILITY

- Easy ground level access
- Convenient spin-on engine filters

DEPENDABILITY

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

MANEUVERABILITY

- 90° articulation, 14'10" (4520 mm) turning radius
- Demand steering, quick response at all engine speeds
- Wheels track

545-B SPECIFICATIONS



ENGINE

MakeAllis-Chalmers
 Model2900 Mark II turbo-charged diesel
 *Flywheel horsepower102
 **Kilowatts76
 Governed rpm2400
 Maximum torque
 ft.-lbs. @ rpm280 ft.-lbs. @ 1700 rpm
 kg-m @ rpm38,7 kgm @ 1700 rpm
 Bore & stroke3.88" x 4.25" (99 x 108 mm)
 Number of cylinders6
 Displacement301 cu. in. (4,93 lit)

*Net flywheel horsepower available at the flywheel of the vehicle engine under SAE J816b standard conditions of 85°F (29°C) and 29.36" (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 11,000 ft. (3350 m) altitude.

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



TORQUE CONVERTER

TypeTwin-turbine
 Torque multiplication5.1 to 1



TRANSMISSION

TypePower shift planetary

	standard		optional	
	mph	km/hr	mph	km/hr
Forward speeds				
1	2.7	4.3	3.6	5.8
2	6.6	10.6	7.9	12.7
3	10.9	17.5	12.0	19.3
4	20.7	33.3	22.0	35.4
Reverse speeds				
1	3.5	5.6	3.5	5.6
2	8.7	14.0	8.2	13.2
3	—	—	12.4	20.0
4	—	—	22.7	36.5

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 planetary. Torque proportioning differentials. Axle housings pin connected to loader frame.

Rear axle oscillation22°
 Inches vertical travel14" (356 mm)



BRAKE SYSTEMS

Service—4 wheel, air over hydraulic, dual system.
 Emergency—dash mounted lever actuates service brakes.
 Parking—mechanically actuated drum brake on drive line.



TIRES

TypeTubeless
 Standard14.00-24 (10 PR) G2
 Optional15.2-25 (12 PR) L2
17.5-25 (12 PR) L2, L3



ELECTRICAL SYSTEM

Voltage12V
 Standard alternator37 amp
 Two batteries190 amp-hr. rating total
 System protected by circuit breakers.



LOADER HYDRAULIC SYSTEM

TypeClosed with pressure & vacuum relief
 CylindersDouble acting
 Lift (2)5.5" x 32.13" (140 x 816 mm)
 Dump (2)4.5" x 37.0" (114 x 940 mm)
 PumpGear type tandem-mounted
 Capacity @ governed rpm55.0 gpm (208,2 lit/min)
 Control valveTwo spool
 Relief valve pressure1825 psi (130 kg/cm²)
 Lift time6.4 sec.
 Lower time5.0 sec.
 Dump time2.5 sec.



STEERING SYSTEM

TypeHydraulic power*
 CylindersTwo, double acting
 Bore & stroke2.5" x 19.0" (64 x 483 mm)
 PumpGear type
 Capacity @ governed rpm15.0 gpm (56,7 lit/min)
 *With demand valve interconnection to loader hydraulic system, and mechanical follow-up linkage.



FILTRATION SYSTEMS

ENGINE
 Lube oilFull flow 25 micron
 FuelFull flow 5 micron
 Air cleanerDry type w/safety element
 CoolantFilter conditioner
 TRANSMISSION-TORQUE CONVERTER
 OilFull flow 25 micron
 HYDRAULIC
 OilFull flow 25 micron
 Full flow magnetic
 Full flow wire mesh
 Pressure-vacuum relief40 micron element



CAPACITIES

ENGINE
 Lube oil4.5 U.S. gal. (17,0 lit)
 Coolant8.5 U.S. gal. (32,2 lit)
 Fuel tank43.0 U.S. gal. (162,7 lit)
 TRANSMISSION8.75 U.S. gal. (33,1 lit)
 HYDRAULIC30.0 U.S. gal. (113,6 lit)
 AXLES12.0 U.S. gal. (45,4 lit)

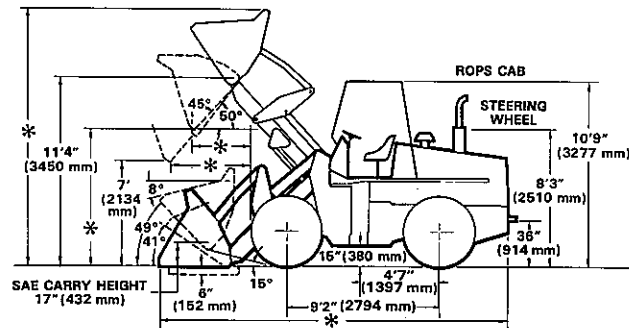
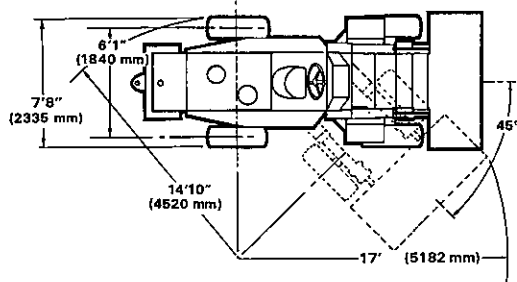


STANDARD EQUIPMENT

- Air filter service indicator ● Air horn ● Anti-freeze ● Back-up alarm ● Bucket level indicator ● ROPS cab with tinted safety glass, front windshield wiper, sliding side windows and headliner ● Pusher fan ● Fan finger guard ● Rear fenders ● Engine intake air heater ● Transmission neutralizer ● Muffler ● Adjustable bucket seat ● Seat belt.
- Gauges — air pressure, low air pressure warning light and buzzer, ammeter, converter oil temperature, engine oil pressure, engine coolant temperature, fuel level dipstick, hourmeter, hydraulic oil level sight gauge, transmission oil pressure.
- Lighting — headlights, rear floodlights, rear stop and taillights, dashlights.

DIMENSIONS

545-B



(*): REFER TO PERFORMANCE DATA CHART BELOW

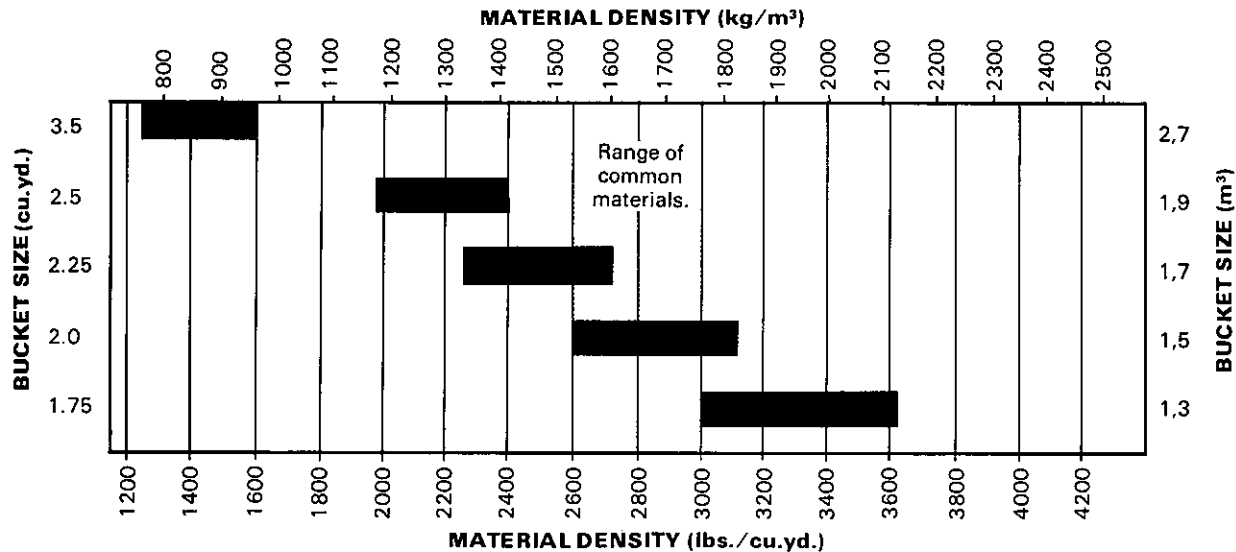
PERFORMANCE DATA

	General Purpose	General Purpose	General Purpose	General Purpose	Light Material	4 in 1
BUCKET CAPACITY RATED	1.75 cu. yd. 1,3 m ³	2.0 cu. yd. 1,5 m ³	2.25 cu. yd. 1,7 m ³	2.5 cu. yd. 1,9 m ³	3.5 cu. yd. 2,7 m ³	4 in 1 1.75 cu. yd. 1,3 m ³
STRUCK CAPACITY	1.42 cu. yd. 1,09 m ³	1.64 cu. yd. 1,25 m ³	1.86 cu. yd. 1,42 m ³	2.08 cu. yd. 1,59 m ³	2.95 cu. yd. 2,26 m ³	1.46 cu. yd. 1,12 m ³
BUCKET WEIGHT	1,308 lbs. 593 kg	1,432 lbs. 650 kg	1,550 lbs. 703 kg	1,675 lbs. 760 kg	2,189 lbs. 993 kg	2,180 lbs. 989 kg
BUCKET WIDTH	95.25" 2419 mm	95.25" 2419 mm	95.25" 2419 mm	95.25" 2419 mm	105" 2667 mm	96" 2438 mm
DUMP HEIGHT @ 45°	9'3" 2817 mm	9'0" 2750 mm	8'11" 2715 mm	8'9" 2667 mm	8'4" 2540 mm	8'8" 2629 mm
REACH @ 45°	31" 784 mm	33" 848 mm	36" 919 mm	38" 974 mm	43" 1087 mm	37" 927 mm
REACH @ 45° @ 7 Ft. (2134 mm)	56" 1429 mm	57" 1454 mm	59" 1509 mm	61" 1540 mm	62" 1580 mm	63" 1609 mm
OVERALL LENGTH (BUCKET ON GROUND)	19'11" 6081 mm	20'2" 6159 mm	20'6" 6236 mm	20'8" 6307 mm	21'3" 6475 mm	21'4" 6502 mm
OVERALL HEIGHT (BUCKET RAISED)	14'3" 4346 mm	14'6" 4423 mm	14'9" 4497 mm	15'0" 4569 mm	15'7" 4737 mm	14'2" 4318 mm
CLEARANCE CIRCLE (BUCKET @ CARRY)	32'11" 10038 mm	33'1" 10082 mm	33'3" 10124 mm	33'4" 10166 mm	34'5" 10488 mm	33'1" 10082 mm
BREAKOUT FORCE	23,700 lbs. 10750 kg	21,430 lbs. 9721 kg	19,560 lbs. 8872 kg	18,060 lbs. 8192 kg	15,100 lbs. 6849 kg	22,740 lbs. 10315 kg
TIPPING LOAD						
0°	14,534 lbs. 6592 kg	14,264 lbs. 6470 kg	13,980 lbs. 6340 kg	13,709 lbs. 6217 kg	12,841 lbs. 5823 kg	13,032 lbs. 5911 kg
35°	13,163 lbs. 5970 kg	12,903 lbs. 5852 kg	12,633 lbs. 5730 kg	12,372 lbs. 5612 kg	11,533 lbs. 5231 kg	11,718 lbs. 5315 kg
40°	12,763 lbs. 5788 kg	12,507 lbs. 5672 kg	12,239 lbs. 5551 kg	11,983 lbs. 5435 kg	11,152 lbs. 5058 kg	11,335 lbs. 5142 kg
45°	12,321 lbs. 5588 kg	12,070 lbs. 5474 kg	11,805 lbs. 5354 kg	11,553 lbs. 5239 kg	10,732 lbs. 4867 kg	10,912 lbs. 4948 kg
OPERATING WEIGHT	20,170 lbs. 9145 kg	20,290 lbs. 9200 kg	20,410 lbs. 9255 kg	20,530 lbs. 9310 kg	21,050 lbs. 9545 kg	21,040 lbs. 9540 kg

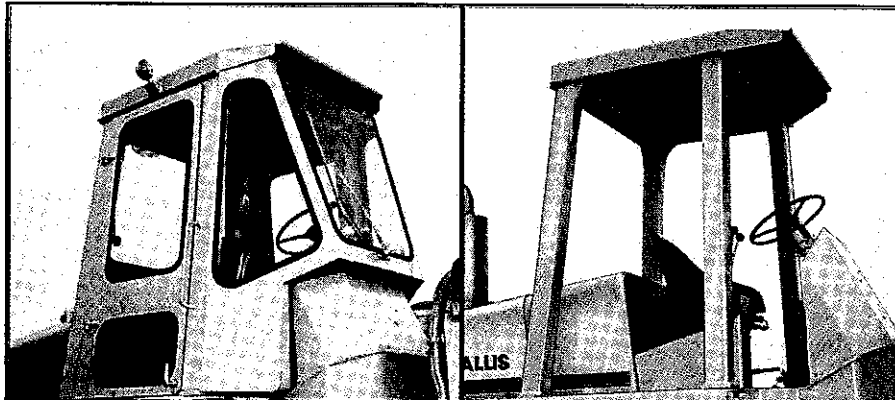
OPTIONAL EQUIPMENT PERFORMANCE DATA	WEIGHT	TIPPING LOAD			
		0°	35°	40°	45°
17.5-25 Tires with 75% CaCl ₂ in rear	+1220 lbs. + 553 kg	+1770 lbs. + 803 kg	+1570 lbs. + 712 kg	+1510 lbs. + 685 kg	+1450 lbs. + 658 kg
15.5-25 Tires with 75% CaCl ₂ in rear	+ 340 lbs. + 154 kg	+ 880 lbs. + 399 kg	+ 765 lbs. + 347 kg	+ 732 lbs. + 332 kg	+ 695 lbs. + 316 kg
15.5-25 Tires	- 600 lbs. - 272 kg	- 491 lbs. - 222 kg	- 452 lbs. - 205 kg	- 441 lbs. - 200 kg	- 429 lbs. - 194 kg
14.00-24 Tires with 75% CaCl ₂ in rear	+ 150 lbs. + 68 kg	+ 676 lbs. + 307 kg	+ 532 lbs. + 241 kg	+ 491 lbs. + 223 kg	+ 448 lbs. + 204 kg
14.00-24 Tires	- 820 lbs. - 371 kg	- 747 lbs. - 338 kg	- 732 lbs. - 332 kg	- 727 lbs. - 329 kg	- 720 lbs. - 326 kg
COUNTERWEIGHT (not to be used with CaCl ₂)	+ 855 lbs. + 387 kg	+1832 lbs. + 831 kg	+1546 lbs. + 701 kg	+1465 lbs. + 664 kg	+1376 lbs. + 624 kg
ROPS CANOPY (in lieu of ROPS Cab)	- 400 lbs. - 181 kg	- 303 lbs. - 138 kg	- 285 lbs. - 130 kg	- 280 lbs. - 127 kg	- 274 lbs. - 125 kg
Less ROPS CAB	-1055 lbs. - 478 kg	- 906 lbs. - 411 kg	- 833 lbs. - 378 kg	- 812 lbs. - 368 kg	- 789 lbs. - 358 kg

NOTE: All performance data and specifications are based on the standard unit equipped with 17.5-25 (12 PR) L3 tires, ROPS cab and bucket as indicated. All data is obtained in compliance with the latest applicable SAE Recommended Practices including J732c and J742b.

545-B BUCKET SELECTION CHART



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.



FIAT-ALLIS ROPS

Complies with SAE and OSHA ROPS requirements.
 Pin-connected for easier removal and installation.
 Rubber isolation mounted for reduced vibration and noise.
 Standard cab equipment includes tinted safety glass, front windshield wiper, two full doors which can be latched back for ventilation, sliding side windows and headliner.
 Optional cab accessories include rear windshield wiper, heater, front and rear defroster fans, turn signals and sound suppression.

OPTIONAL AND ALLIED EQUIPMENT

Air conditioner
 Alternator 61 amp.
 Automatic bucket positioner
 Automatic lift kickout
 Brake system moisture ejector
 Brake system alcohol injector
 Buckets-special purpose, light material, rock, multipurpose, side dump, ejector, tine, etc.

Bucket teeth
 ROPS canopy
 Counterweight
 Differential, no-spin
 Drawbar
 Engine oil by-pass filter
 Ether starting aid
 Front fenders

Hood side panels
 Ladder, right side dual access
 Lift eyes
 Lights, additional front flood
 Logging counterweight
 Logging and landfill guards
 Log and lumber forks
 Rear axle disconnect

Single lever hydraulic control
 Snow plows and wings
 Steering knob
 Supplemental steering system
 Tires, special purpose
 Tool kit
 Vandalism protection
 Warning light for parking brake

*SOF-SHIFT is a Fiat-Allis trademark



The information contained herein is general in nature and is not intended for specific application purposes. 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 non-standard items.