

16-B

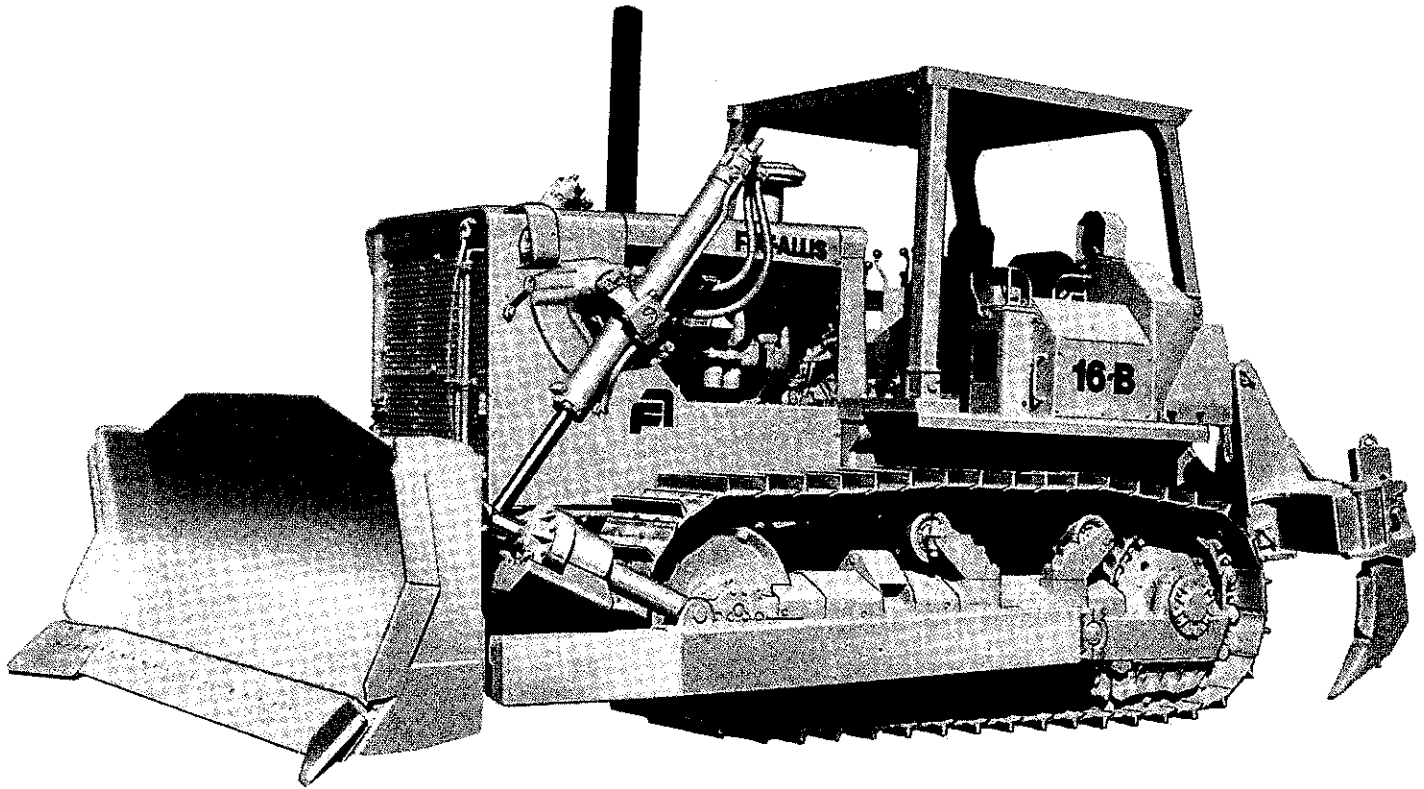


Illustration includes
Optional Equipment.

16-B Crawler Tractor

POWER SHIFT ... 195 Flywheel H.P.

POWER

- An engine with thousands of hours of excellent customer acceptance . . . fuel economy — dependability — and a minimum of operational cost.

POWER TRAIN

- The exclusive modulated engine clutch. Transmission shifting is sequential with the modulated clutch . . . transmission clutches apply under no engine power . . . any shift shock is absorbed by the heavy duty modulated engine clutch.

SAFETY AND COMFORT

- Designed with the operator's safety and convenience in mind: comfortable operator's compartment . . . roll-over protective structures (ROPS) . . . canopies and fully enclosed cabs with all accessories.

PROFITABILITY

- Dozing ability . . . four moldboards to meet any job requirement . . . 16HS (straight), 16HSU (semi "U"), 16HA (angle), and 16HA severe service.
- Pushing ability . . . powered to push load the smaller scrapers . . . working in tandem will give production to please any contractor.
- Ripping ability . . . capabilities of medium duty ripping . . . with penetration up to 60" (1525 mm) with a single shank ripper and 27" (685 mm) on a three shank ripper.

16-B SPECIFICATIONS



ENGINE

FLYWHEEL HORSEPOWER*	195
KILOWATTS**	145
Make and Model	Allis-Chalmers 17000 Mark II
Type	Diesel, 4-cycle, Turbocharged Direct Injection
Governed RPM	1750
Number of Cylinders	6
Bore and Stroke	5 1/4" x 6 1/2" (133 x 165 mm)
Displacement	844 cu. in. (13.8 lit)

*Net flywheel horsepower available at the flywheel of the vehicle engine under SAE J816A standard conditions of 85°F (20°C) and 29.39" (746 mm) hg. after deductions have been made for Fan, Alternator, Lube Oil Pump, Water Pump, Air Cleaners, and Fuel Pump. This vehicle may be operated up to 8,000 ft. (2438 m) altitude without derating the engine.

**Kilowatts is the International System of Units for power. One (1) horsepower equals 0.746 kilowatt in U.S.A. units.



ELECTRICAL SYSTEM

Voltage	24V
Standard Alternator	20 amp.
Number of Batteries	2
Battery amp-hour rating	180



MODULATED CLUTCH

Type	Multi-disc
Lubrication	Full Pressure
Actuation	Shift Lever



TORQUE CONVERTER

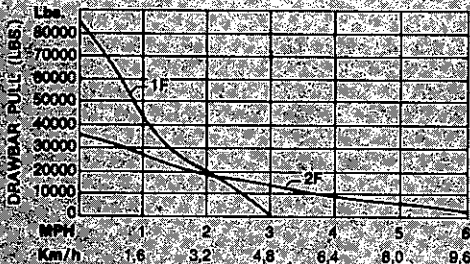
Type	Single Stage with Stationary Housing
Torque Multiplication	5.06 to 1



TRANSMISSION

Type	Full Power Shift, Countershaft, Constant Mesh
Actuation	Single Lever
Clutches	Multi-disc, Hydraulic
Lubrication	Full Pressure

Fwd.	MPH	Km/h	Rev.	MPH	Km/h
1st	0-3.0	(0-4.8)	1st	0-3.4	(0-5.5)
2nd	0-6.2	(0-10)	2nd	0-7.0	(0-11.3)



[Maximum drawbar pull depends on traction and weight of tractor with mounted equipment.



STEERING AND BRAKING

Hydraulically actuated clutches with modulated control provide maximum maneuverability with minimum effort. Mechanically actuated double wrap brakes provide dead engine braking.

Clutches and brakes are oil cooled and lubricated for long troublefree hours of operation.

Friction Surfaces —

Each Clutch Assembly 30

Total Friction Area —

Each Clutch Assembly 1959 sq. in. (12639 cm²)

Total Friction Area —

Each Brake Assembly 618.8 sq. in. (3992 cm²)



FINAL DRIVES

Type	Double Reduction
Ratio	7.6:1
Lubrication	Splash



TRACK

Non-sealed track. Hydraulic track adjusters with interlocking guards. Sprockets with bolt on segments. Outer sprocket guards. Disc idlers.

Tracking guiding guards. Track rollers, carrier rollers and idlers are permanently lubricated and sealed.

Track Frame	Oscillating
Track Rollers (each side)	7
Double Flange	4
Single Flange	3
Number of Shoes (each side)	41
Width of Standard Track Shoe	22" (559 mm)
Length of Track on Ground	8' 11 1/2" (2731 mm)
Ground Contact Area	4733 sq. in. (30537 cm²)
Gauge	78" (1981 mm)
Ground clearance	13" (330 mm)



HYDRAULIC SYSTEM

Reservoir	Closed
Cylinders	Double Acting
Dozer (Two)	5" x 43" (127 mm x 1092 mm)
Tilt (Optional)	8" x 4 1/2" (203 mm x 114 mm)
Pump	
Capacity @ Governed RPM	
Large Section	64 GPM (242 lit/min)
Small Section	32 GPM (121 lit/min)
Control Valve	1 Spool, 3 Spool Optional
Relief Valve Pressure	2000 psi (140 kg/cm²)
Actuation	Single Lever
Dozer	Raise, Hold, Lower, Float
Tilt (Optional)	Left and Right



FILTRATION SYSTEMS

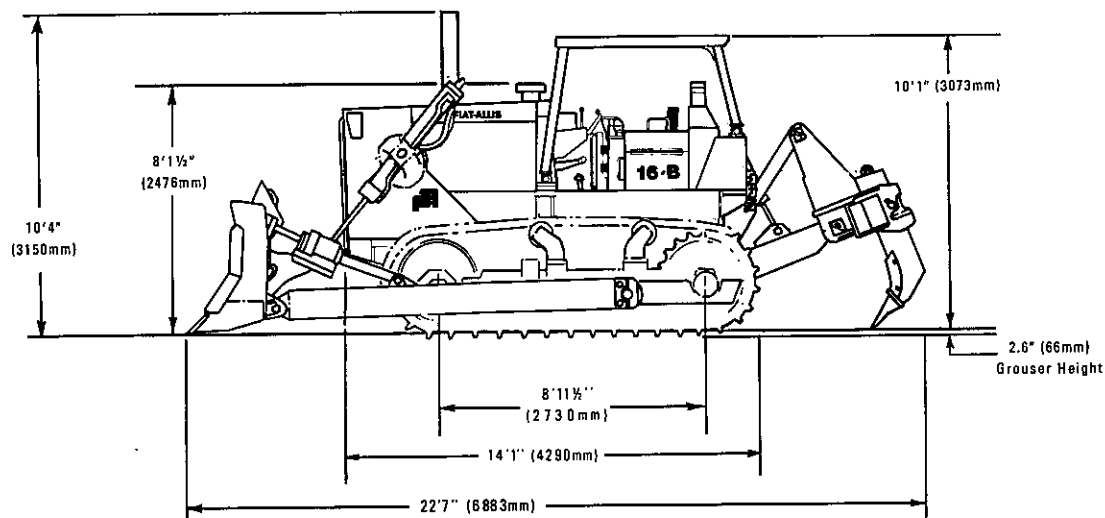
ENGINE	
Lube Oil	2 Full Flow 25 Micron
	One By-Pass 5 Micron
Fuel	2 Full Flow 5 Micron
Air Cleaner	Dry Type w/ Safety Element and Automatic Dust Evacuator
Coolant	Water Filter
TRANSMISSION	
Modulated Clutch, Torque Converter	1 Full Flow 10 Micron
STEERING AND BRAKING	1 Full Flow 25 Micron
HYDRAULIC	2 Full Flow 10 Micron



CAPACITIES

ENGINE CAPACITIES	
Lube Oil	
Power Shift	14 1/2 U.S. gal (54 lit)
Coolant	18 U.S. gal (68 lit)
Fuel Tank	117 U.S. gal (443 lit)
TRANSMISSION, TORQUE CONVERTER	
Modulated Clutch	
Power Shift	16 U.S. gal (60.5 lit)
STEERING AND BRAKING	27 U.S. gal (102 lit)
FINAL DRIVES (each side)	5 1/2 U.S. gal (21 lit)
HYDRAULIC SYSTEM	42 U.S. gal (159 lit)
HYDRAULIC SYSTEM w/ Ripper	43 U.S. gal (164 lit)

DIMENSIONS



DOZER

DOZER TYPE	Straight	Semi "U"	Angle	Angle (Sev. Ser.)
DOZER MODEL	16 HS	16HSU	16 HA	
ASSEMBLY WEIGHT				
w/Tilt	6485 (2941 kg)	7475 (3390 kg)	6085 (2760 kg)	7060 (3202)
MOLDBOARD				
Width	11'7" (3531 mm)	11'9" (3581 mm)	13'10" (4216 mm)	14' (4267 mm)
Height	4'4" (1321 mm)	4'4" (1321 mm)	38" (965 mm)	38" (965 mm)
Max. Lift Above Ground	4' (1219 mm)	4'2 1/2" (1314 mm)	46" (1168 mm)	46" (1168 mm)
Max. Drop Below Ground	19'4" (493 mm)	17 1/2" (427 mm)	21" (533 mm)	21" (533 mm)
Max. Tilt — Either End	15" (381 mm)	16" (406 mm)	12" (305 mm) Mech.	12" (305 mm) Mech.
Max. Pitch Adjustment	10°	10°		
Max. Angle —				
Either Direction	—	—	25°	25°
CUTTING EDGES				
Center Section — Reversible	Yes	Yes	Yes	Yes
Width	8" (203 mm)	10" (254 mm)	8" (203 mm)	8" (203 mm)
Thickness	7/8" (22 mm)	1" (25 mm)	7/8" (22 mm)	7/8" (22 mm)
END OR CORNER BITS				
Width	8 1/4" (210 mm)	12.8" (325 mm)	8 3/8" (213 mm)	9.8" (249 mm)
Thickness	1 1/4" (32 mm)	1 3/8" (35 mm)	1 1/4" (32 mm)	1 1/2" (38 mm)
Interchangeable	Yes	No	No	No
Replaceable	Yes	Yes	Yes	Yes



DIMENSIONS

16-B bare unit weight — 41,900 lbs. (19011 kg)

Unit equipped w/ROPS

Bare unit width — 100" (2540 mm) with Std. Shoe

Units	Overall Length	Weight - lbs.	Shoe Allowance
HS w/drawbar	17' 4" (5286 mm)	48,385 lbs. (21944 kg)	24" (610 mm)
*HS w/16-R	22' 2" (6744 mm)	55,631 lbs. (25230 kg)	
HS w/Kelley KR16C-1	24' 10" (7570 mm)	54,031 lbs. (24504 kg)	
HSU w/drawbar	17' 9" (5414 mm)	49,375 lbs. (22392 kg)	24" (610 mm)
*HSU w/16-R	22' 7" (6883 mm)	56,621 lbs. (25678 kg)	
HSU w/Kelley KR16C-1	25' 3" (7700 mm)	55,021 lbs. (24953 kg)	
HA w/drawbar	17' 5" (5325 mm)	47,985 lbs. (21762 kg)	24" (610 mm)
*HA w/16-R	22' 3" (6782 mm)	55,231 lbs. (25048 kg)	
HA w/Kelley KR16C-1	25' 0" (7620 mm)	53,631 lbs. (24323 kg)	
HASS w/drawbar	17' 7" (5372 mm)	48,960 lbs. (22204 kg)	24" (610 mm)
HASS w/16-R	22' 5" (6832 mm)	56,206 lbs. (25490 kg)	
HASS w/Kelley KR16C-1	25' 2" (7670 mm)	54,606 lbs. (24765 kg)	

*16-R with 3 shanks

ROPS Canopy incl. in Weights

Add for
ROPS Cab

1365 lbs. (620 kg)



RIPPER

Overall Width 6'7" (2007 mm)
Ripping Width 6' (1829 mm)
Weight (Basic Ripper —
without Shanks 6188 lbs. (2781 kg)

BEAM (Welded Box Section)

Length 6'7" (2007 mm)
Section 13" x 13" (330 x 330 mm)

SHANKS (None standard, 1, 2, or 3 optional)

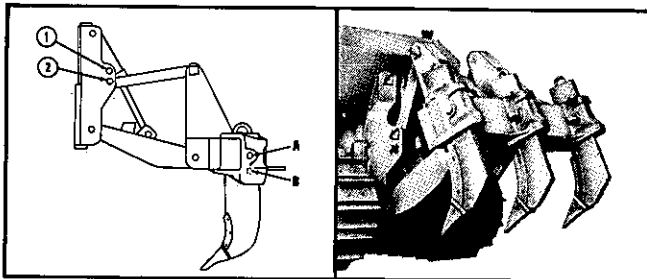
Type Straight and adjustable to 2 positions
Positions 2
Spacing, center to center of shank 36" (914 mm)
Max. Depth of Penetration 27" (686 mm)
Length 50½" (1283 mm)
Section 2.875" x 10.75" (73 x 273 mm)
Weight, Ea. Shank 540 lbs. (245 kg)
(weight includes wear plate and tooth)

TEETH

Type One piece, forged, self-sharpening
Length 15" (381 mm)
Weight, each 32½ lbs. (15 kg)

CONTROL

Hydraulic Two double acting cylinders
6" Bore x 17.8" Stroke (152 x 452 mm)



	Max.	Ground Clearance Under Tip, Raised		Overall Length Dozer & Ripper, Raised	
Shank Position	Penetration Inches (mm)	Strut Positions		Strut Positions	
		1	2	1	2
A	27" (686 mm)	10.4" (264 mm)	14.7" (373 mm)	268" (6807 mm)	272" (6909 mm)
B	20" (508 mm)	16.5" (419 mm)	20" (508 mm)	265" (6731 mm)	268" (6807 mm)



STANDARD EQUIPMENT

- Air cleaner — dry w/service indicator and safety element
- Alternator — 20 amp
- Anti-freeze
- Back-up alarm
- Brakes — double wrap, oil cooled
- Clutch, engine modulated, oil cooled
- Decelerator — foot pedal
- Drawbar — fixed

- Fan — blower
- Filter, water
- Gauges: engine oil pressure, water temperature, ammeter, trans. clutch pressure
- Horn
- Hourmeter, electric
- Hydraulics: tank and 1 spool valve, pump, dozer cyls. and piping
- Idlers — disc
- Muffler
- Pull hook, front
- Radiator guard, hyd. dozer
- ROPS canopy

- Safety belt
- Sprockets — segmented
- Starting — 24 volt direct electric with master switch lock
- Steering clutches — modulated, hydraulic powered
- Torque converter
- Track, unsealed
- Track adjusters — hydraulic
- Track rollers — 7 each side
4 double flange
3 single flange
- Track shoes — 22" (558 mm) full grousers
- Transmission — powershift



OPTIONAL EQUIPMENT

- Alternator — 50 amp
- Air cleaner unloader extension
- Drawbar — swinging or fixed sev. service
- Fan — reversible
- Grill — severe service
- Guards: tank guard, sprocket seal, sprocket, outer, idler seal and inner sprocket, partial roller, full roller, track frame end

- bottom-fully covered, crankcase and transmission
- Lighting — 2 headlights and 2 rear floodlights
- Muffler S/N 10301 - 13556
- Radiator, copper fin (severe service)
- Radiator, steel fin
- Radiator, sand grid
- ROPS cab
- Screen, rear for canopy
- Sweeps, front for canopy
- Special paint

- Starter — high capacity
- Starting fluid primer
- Tool kit — w/tool box
- Track, sealed
- Track shoes:
20" (508 mm) full grouser & sev. ser.
22" (558 mm) full grouser & sev. ser.
24" (610 mm) full grouser & sev. ser.
- Valve, 3 spool
- Vandalism protection
- Optional dozer equipment
- Ripper

FIAT-ALLIS

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