



# Backhoes for 850C Loader and Dozer



#### CHOICE OF CASE BACKHOES

14' (4.2 m) backhoe or 14' - 18' (4.2 m - 5.5 m) Case Extendahoe. Extendahoe hydraulically extends or retracts from operator's seat.

#### OVER CENTER TRANSPORT POSITION

For stability in loading or dozing operations.

#### FAST, ACCURATE 180° SWING

180° swing with choice of foot swing or dual-lever hand control. Regenerative hydraulics for fast, continuous cycling action. Hydraulic cushioning protects boom on full swings.

#### OPERATOR LOCATION

When operating either tractor or backhoe operator is seated beneath ROPS structure.

Unit shown is equipped with non-standard items.

## J I Case

A Tenneco Company

Construction Equipment Division  
700 State Street Racine, WI 53404 U.S.A.



# 14' (4.2 m) BACKHOE SPECIFICATIONS FOR 850C LOADER AND DOZER

## OPERATING DATA

	14' (4.2 m) Backhoe
Overall reach - from sprocket center line	21' 4" (6.50 m)
Digging radius from swing pivot	17' 8.5" (5.40 m)
Digging depth - SAE	14' (4.27 m)
Loading height	11' 1" (3.38 m)
Loading reach	6' 7.5" (2.02 m)
Swing arc	180°
Bucket rotation:	
#1 position	166°
#2 position	151°
Stabilizer spread:	
Operating position	108" (2.75 m)
Transport position	80.6" (2.05 m)
Digging force, bucket cylinder, SAE	9,732 lbs (4 414 kg)
Digging force, dipper cylinder, SAE	5,549 lbs (2 517 kg)
Leveling angle (maximum grade on which the backhoe will make a vertical cut)	13°

## VEHICLE/BACKHOE SPECIFICATIONS

	14' (4.2 m) Backhoe
Transport height	11' 2" (3.40 m)
Overall height, maximum	19' 11.5" (6.08 m)
Overall width (travel position):	
Loader	80.6" (2.05 m)
Angle/tilt dozer	102" (2.59 m)
Overall length:	
Loader	21' 1.8" (6.45 m)
Angle/tilt dozer	20' 1.8" (6.14 m)
Ground clearance	10.7" (272 mm)
Approximate operating weights:	
Loader	23,635 lbs (10 720 kg)
Angle/tilt dozer	20,045 lbs (9 092 kg)

**NOTE:** Dimensions and weights include 24" (610 mm) backhoe bucket and 1.5 yd.<sup>3</sup> (1.15 m<sup>3</sup>) bucket on loader.

## BACKHOE HYDRAULIC SYSTEM

**Pump:** Gear type, torque converter mounted, driven from engine. 31 gpm @ 2000 rpm (117.3 lit/min @ 2000 r/min).

**Control valve:** Four spool, sectional valve. Foot swing or hand swing (optional), regeneration and hydraulic cushioned swing stops.

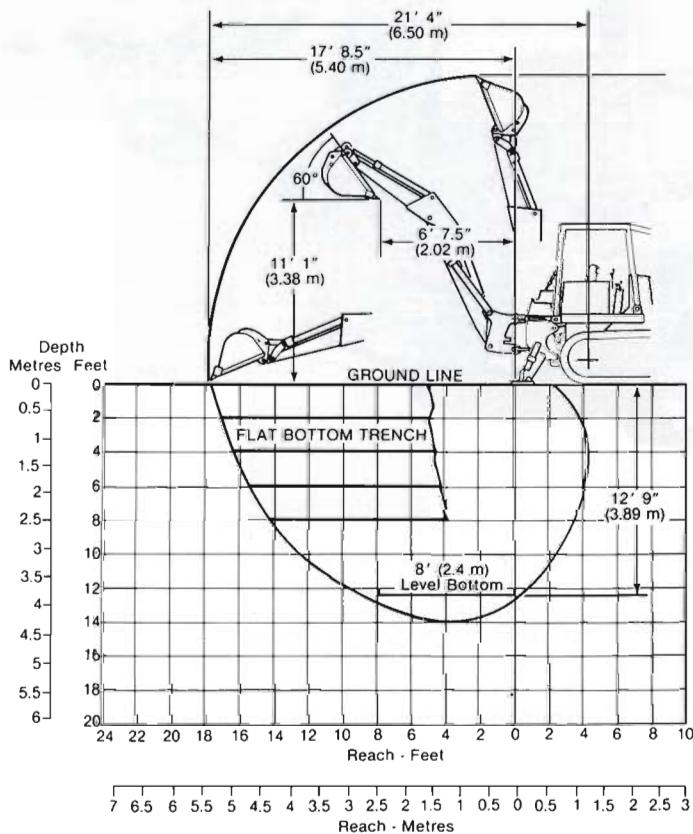
Monocast, two spool valve for stabilizers with pilot check valves.

**System relief pressure:** 2,300 psi (15 858 kPa).

**Hydraulic lines:** Steel tubing with flared or brazed fittings and wire braid, high pressure hose with crimped, full flow fittings.

**Cylinders:** Double acting with hardened and chrome plated rods.

Stabilizer cylinders (2)	4.00" dia x 21.77" stroke, 2.00" rod (102 mm dia x 558 mm stroke, 51 mm rod)
Swing cylinders (2)	4.00" dia x 11.22" stroke, 2.00" rod (102 mm dia x 285 mm stroke, 51 mm rod)
Boom cylinders (2)	3.25" dia x 41.91" stroke, 1.75" rod (83 mm dia x 1 064 mm stroke, 44 mm rod)
Dipper cylinder (1)	4.00" dia x 35.12" stroke, 2.00" rod (102 mm dia x 892 mm stroke, 51 mm rod)
Bucket cylinder (1)	3.50" dia x 39.56" stroke, 2.00" rod (89 mm dia x 1 005 mm stroke, 51 mm rod)





# 14' - 18' (4.2 m - 5.5 m) EXTENDAHOE®

## OPERATING DATA

	14' - 18' (4.2 m - 5.5 m) Extendahoe	
	(Retracted)	(Extended)
Overall reach - from sprocket center line	21' 7" (6.58 m)	25' 4.3" (7.73 m)
Digging radius from swing pivot	17' 11.7" (5.48 m)	21' 9" (6.63 m)
Digging depth - SAE	14' (4.27 m)	18' (5.49 m)
Loading height	12' (3.66 m)	14' 10.9" (4.54 m)
Loading reach	5' 7.1" (1.70 m)	8' 3.3" (2.52 m)
Swing arc	180°	180°
Bucket rotation:		
#1 position	162°	162°
#2 position	146°	146°
Stabilizer spread:		
Operating position	108" (2.75 m)	108" (2.75 m)
Transport position	80.6" (2.05 m)	80.6" (2.05 m)
Digging force, bucket cylinder, SAE	9,827 lbs (4 458 kg)	9,827 lbs (4 458 kg)
Digging force, dipper cylinder, SAE	5,374 lbs (2 438 kg)	3,747 lbs (1 700 kg)
Leveling angle (maximum grade on which the backhoe will make a vertical cut)	13°	13°

## VEHICLE/BACKHOE SPECIFICATIONS

	14' - 18' (4.2 m - 5.5 m) Extendahoe
Transport height	11' 4.3" (3.46 m)
Overall height, maximum	24' 5.9" (7.47 m)
Overall width (travel position):	
Loader	80.6" (2.05 m)
Angle/tilt dozer	102" (2.59 m)
Overall length:	
Loader	21' 7.8" (6.60 m)
Angle/tilt dozer	20' 7.8" (6.29 m)
Ground clearance	10.7" (272 mm)
Approximate operating weights:	
Loader	24,130 lbs (10 945 kg)
Angle/tilt dozer	20,540 lbs (9 316 kg)

**NOTE:** Dimensions and weights include 24" (610 mm) backhoe bucket and 1.5 yd.<sup>3</sup> (1.15 m<sup>3</sup>) bucket on loader.

## BACKHOE HYDRAULIC SYSTEM

**Pump:** Gear type, torque converter mounted, driven from engine. 31 gpm @ 2000 rpm (117.3 lit/min @ 2000 r/min).

**Control valve:** Four spool, sectional valve. Foot swing or hand swing (optional), regeneration and hydraulic cushioned swing stops.

Monocast, two spool valve for stabilizers with pilot check valves.

**System relief pressure:** 2,300 psi (15 858 kPa).

**Hydraulic lines:** Steel tubing with flared or brazed fittings and wire braid, high pressure hose with crimped, full flow fittings.

**Cylinders:** Double acting with hardened and chrome plated rods.

Stabilizer cylinders (2) . . . . . 4.00" dia x 21.77" stroke, 2.00" rod (102 mm dia x 558 mm stroke, 51 mm rod)

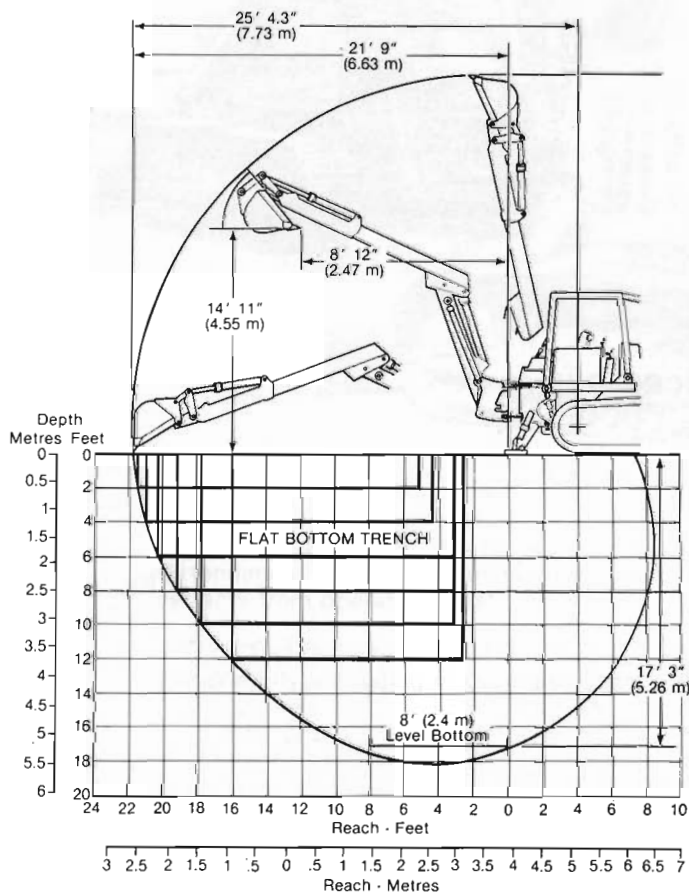
Swing cylinders (2) . . . . . 4.00" dia x 11.22" stroke, 2.00" rod (102 mm dia x 285 mm stroke, 51 mm rod)

Boom cylinders (2) . . . . . 3.25" dia x 41.91" stroke, 1.75" rod (83 mm dia x 1 064 mm stroke, 44 mm rod)

Dipper cylinder (1) . . . . . 4.00" dia x 35.12" stroke, 2.00" rod (102 mm dia x 892 mm stroke, 51 mm rod)

Bucket cylinder (1) . . . . . 3.50" dia x 39.56" stroke, 2.00" rod (89 mm dia x 1 005 mm stroke, 51 mm rod)

Dipper extension cylinder (1) . . . . . 3.00" dia x 48.00" stroke, 1.50" rod (76 mm dia x 1 219 mm stroke, 38 mm rod)



## BACKHOE BUCKETS

inch	Width		Type	Weight	
	mm			lbs	kg
12	305		Trenching	198	90
18	457		Trenching	238	108
24	610		Trenching	270	122
30	762		Trenching	306	139
36	914		Trenching	346	157
12	305		Bellhole	128	58
16	406		Bellhole	156	71
30	762		Bellhole	218	99
36	914		Bellhole/Graveyard	266	121
24	610		HD Trenching	380	172
30	762		HD Trenching	410	186
36	914		HD Trenching	458	208
			Frost Point	161	73

## STANDARD BACKHOE EQUIPMENT

Case built, easy on/off 14' (4.2 m) backhoe, less bucket, with backhoe controls and hydraulics ● Stabilizer pads (cleated) ● Foot swing pedals ● Single flipover seat ● Boom cylinder guards.

## OPTIONAL BACKHOE EQUIPMENT

Various sizes and types of backhoe buckets ● 14' - 18' (4.2 m - 5.5 m) hydraulic Extendahoe, less bucket, with backhoe controls and hydraulics ● Backhoe dipper light ● Street-cemetery pads for stabilizers ● Dual hand-lever backhoe controls ● Heavy duty backhoe teeth (field installed only) ● Ripper tooth (frost point).

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

### IMPORTANT

J I Case Company reserves the right to change these specifications without notice and without incurring any obligation relating to such change.



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