

# 1840 Skid Steer



## ENGINE

Model..... Case 4-390  
 Type..... Diesel  
 Cylinders..... 4  
 Bore/Stroke ..... 4.0" x 4.72"  
 (102 mm x 120 mm)  
 Displacement..... 239 in<sup>3</sup> (3.92 L)  
 Fuel injection ..... Direct  
 Horsepower per SAE J1349 and J1995 –  
 Gross ..... 54 (40 kW) @ 2000 rpm  
 Net ..... 51 (38 kW) @ 2000 rpm  
 Peak torque –  
 @ 1200 rpm..... 179 lb·ft (243 N·m)

## POWERTRAIN

Drive pump ..... Tandem, axial piston  
 hydrostatic transmission  
 Flow ..... Bi-directional  
 Controls..... Low-effort, servo assist  
 Drive motors..... Fixed displacement  
 high torque/low speed  
 gerotor motors  
 Final drive..... Single stage reduction  
 chain drive to all wheels  
 Drive chain –  
 Size..... No. 80 HT  
 Brakes ..... Mechanical parking latch  
 spring applied, cable release  
 Engagement..... Raise the seat bar  
 Travel speed..... 0 - 6.2 mph  
 (0 - 10 km/h)

## HYDRAULIC SYSTEM

Standard equipment pump –  
 Gear pump driven directly  
 off engine crankshaft  
 Pump flow @ rated engine rpm  
 Total ..... 15.3 gpm (57.9 L/min)  
 Loader control valve..... 2-spool  
 mono cast with  
 float detent  
 Main relief ..... 2300 psi  
 (159 bar)  
 Hydraulic filters ..... 6-micron,  
 spin-on replaceable element  
 with warning light

## ELECTRICAL SYSTEM

Alternator..... 65 amp  
 Battery ..... 12 volt low-maintenance  
 685 cold-cranking amps

## OPERATOR

### ENVIRONMENT

Roll out ROPS/FOPS canopy  
 w/side screens  
 Seat presence switch  
 Vinyl seat  
 2" (51 mm) retractable seat belt  
 Restraint bar w/integral armrests  
 Two hands-only control levers  
 Hand throttle  
 Loader control lockout system  
 Loader arm lock strut  
 Front and rear halogen floodlights  
 Floor cleanout panel

### INSTRUMENTATION

Electro-mechanical hourmeter  
 Fuel level LED bar graph  
 Warning lights –  
 Alternator output  
 Battery voltage  
 Fuel level  
 Engine coolant temperature  
 Transmission charge pressure  
 Transmission temperature  
 Engine oil pressure  
 Air cleaner restriction  
 Hydraulic filter restriction  
 Systems normal  
 Warning alarms –  
 Engine coolant temperature  
 Transmission charge pressure  
 Alternator output  
 Engine oil pressure  
 Hydraulic oil temperature  
 Battery voltage  
 Seat belt reminder

### SERVICE CAPACITIES

Fuel tank..... 19.5 gal (73.8 L)  
 Engine oil w/filter ..... 11 qt (10.4 L)  
 Engine cooling system..... 18 qt (17 L)  
 Hydraulic system –  
 Reservoir  
 w/filter change ..... 23 qt (21.8 L)  
 Total ..... 10.5 gal (39.8 L)

Chain tanks (per side) ..... 5 qt (4.7 L)

## OPTIONS

### OPERATOR'S COMPARTMENT

Deluxe suspension seat  
 Seat backrest extension  
 Horn  
 3" (76 mm) seat belt  
 Foot-operated loader controls  
 Low noise package

### HYDRAULICS

Hydraulic self-leveling  
 High-flow auxiliary hydraulics  
 30 gpm (114 L/min)  
 Auxiliary hydraulics  
 15.3 gpm (57.9 L/min)

### OTHER

Backup alarm  
 Rotating beacon  
 Front and rear lift brackets  
 Cold start kit  
 Cooling package  
 Drawbar  
 Special paint

### BUCKETS

Bucket Width	Struck Capacity	Heaped Capacity	Weight
<b>DIRT</b>			
54" (1.4 m)	7.9 ft <sup>3</sup> (0.22 m <sup>3</sup> )	10.1 ft <sup>3</sup> (0.28 m <sup>3</sup> )	343 lb (155 kg)
63" (1.6 m)	9.1 ft <sup>3</sup> (0.26 m <sup>3</sup> )	11.8 ft <sup>3</sup> (0.34 m <sup>3</sup> )	374 lb (170 kg)
<b>UTILITY</b>			
54" (1.4 m)	13.7 ft <sup>3</sup> (0.39 m <sup>3</sup> )	17.0 ft <sup>3</sup> (0.48 m <sup>3</sup> )	428 lb (194 kg)
63" (1.6 m)	15.9 ft <sup>3</sup> (0.45 m <sup>3</sup> )	19.8 ft <sup>3</sup> (0.56 m <sup>3</sup> )	462 lb (209 kg)
73" (1.85 m)	18.5 ft <sup>3</sup> (0.52 m <sup>3</sup> )	23.1 ft <sup>3</sup> (0.65 m <sup>3</sup> )	496 lb (225 kg)

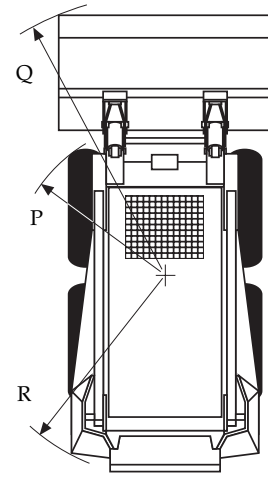
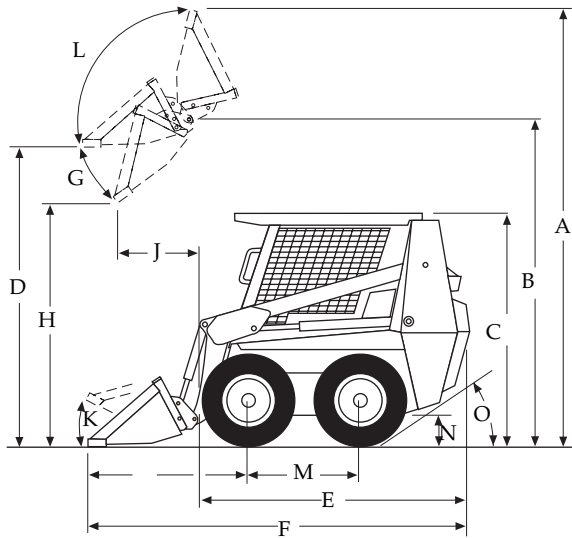
## TIRES

### Pneumatic (tubeless)

Goodyear 10.00 x 16.5, 6PR Traction  
 Width over tires..... 59.9" (1.52 m)  
 Galaxy "Beefy Baby" 10.00 x 16.5, 8PR  
 Width over tires..... 59.9" (1.52 m)  
 Galaxy "Fat Foot" 13.00 x 16.5, 10PR  
 Width over tires..... 65" (1.65 m)

### Non-Pneumatic

Mitco 6.50 x 16 Industrial Lug, Solid  
 Width over tires..... 53.2" (1.35 m)  
 Airboss 7.50 x 15 Industrial Lug  
 Width over tires..... 57.6" (1.46 m)  
 Airboss Altrakka II 10.00 x 16.5



## DIMENSIONS

- A. Overall operating height – dirt bucket ..... 145.5" (3.69 m)  
Height to\*
- B. Bucket hinge pin..... 110.5" (2.81 m)
- C. Top of rollover protective structure (ROPS) ..... 77" (1.96 m)
- D. Bottom of level bucket, loader arm fully raised ..... 105" (2.67 m)
- Overall length –
- E. w/o attachment ..... 96.5" (2.45 m)
- F. w/bucket on ground..... 125" (3.18 m)
- G. Dump angle at maximum height –  
Dirt bucket ..... 42.5°
- H. Dump height – loader arm fully raised –  
Dirt bucket..... 84" (2.13 m)
- J. Reach – loader arm fully raised –  
Dirt bucket..... 22" (0.56 m)
- Maximum attachment rollback –
- K. Bucket on ground..... 29°
- L. Bucket at full height..... 100°
- M. Wheelbase..... 37" (0.94 m)
- N. Ground clearance ..... 6.5" (0.17 m)
- O. Angle of departure..... 26.5°
- Clearance circle front –
- P. Less bucket ..... 44" (1.12 m)
- Q. w/54" (1.37 m) dirt bucket on ground ..... 73" (1.85 m)
- Q. w/63" (1.60 m) dirt bucket on ground ..... 74.8" (1.90 m)
- R. Clearance circle rear..... 59" (1.50 m)
- Operating weight..... 5,558 lb (2521 kg)

NOTE: \*Dimensions taken with full fuel, 175 lb (80 kg) operator, and standard equipment including 100 lb (45 kg) counterweight, 54" (1372 mm) dirt bucket and 7.00 x 15 6PR tires.

## PERFORMANCE SPECS

- Operating load ..... 1,400 lb (635 kg)
- Tipping load..... 2,800 lb (1270 kg)
- Breakout force –
- Lift cylinder..... 2,773 lbf  
(12 335 N)
- Bucket cylinder ..... 3,066 lbf  
(13 638 N)
- Cycle time –
- Raise ..... 4.7 seconds
- Lower ..... 2.6 seconds
- Dump ..... 2.3 seconds
- Rollback ..... 1.5 seconds

NOTE: SAE rated lift capacities. Cycle time measured with rated load in bucket.

Goodyear is a trademark of Goodyear Tire & Rubber Company.

Mitco is a trademark of Mitchell Industrial Tire Company.

Galaxy, Beefy Baby and Fat Foot are trademarks of the Galaxy Tire Co.

AirBoss and Altrakka are trademarks of IATCO Industries Inc.

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

Form No. CE 184-05-98  
Replaces Form No. - None

IMPORTANT: Case Corporation reserves the right to change these specifications without notice and without incurring any obligation relating to such change. Case Corporation does not warrant the safety or reliability of attachments from other manufacturers.

Visit Case Corporation on the Web at:  
<http://www.casecorp.com>  
Printed in U.S.A.

© 1998 CASE CORPORATION  
All Rights Reserved.  
Case is a registered trademark of Case Corporation.

**CASE CORPORATION**  
700 STATE STREET  
RACINE, WI 53404 U.S.A.

**CASE CANADA CORPORATION**  
450 SHERMAN AVENUE NORTH  
HAMILTON, ON L8N 4C4 CANADA

