

# TIGER

## LS400 Log Stacker Conversion



Transform your existing Caterpillar® 980G wheel loader into a highly efficient log stacker with a capacity in excess of 36 tonnes!

OPERATING WEIGHT	
METRIC	U.S.
60 000 kg	132 000 lbs

GROSS POWER	
METRIC	U.S.
242 kW	325 HP

LIFT CAPACITY	
METRIC	U.S.
36 000 kg	80 000 lbs

STANDARD LIFT HEIGHT	
METRIC	U.S.
5030 mm	16' 6"



SMART SOLUTIONS THAT MAKE A DIFFERENCE

# Tiger LS400

## The new standard for productive full length log handling

The Tiger LS400 Log Stacker is the perfect workhorse for unloading timber direct from trucks and railroad wagons. The LS400's grapple design allows for handling both full length and cut-to-length logs equally easily, while the unique tilting carriage and fixed mast transmits load forces evenly throughout the structure.

Nimble and economical, the LS400 can turn in less than 8.5 metres (27' 5"), while the Cat® 3406C turbo-charged diesel and low machine weight features incredibly low running costs. The rear wheel drive configuration is simple and reliable, perfectly suited to most timber yards with hard surfaces.

Any Cat® 980G power module fitted with a heavy duty forestry transmission can be used as the basis for a Tiger LS400 conversion. Also required are a transmission mounted park brake, ride control, third function hydraulics and right hand door entry on cab. These options can be retrofitted during assembly.

### Engine

The 980G power module features a four-stroke Cat® 3406C, in-line six cylinder, turbo-charged, after-cooled low emission diesel engine.

#### Power/Speed at 2100 rpm:

Gross power	242 kW	325 hp
Displacement	14.6 liters	893 cu.in.

### Power train

**Transmission:** Caterpillar planetary power shift forestry transmission required.

**Rear Axle:** Standard 980G rear axle.

**Dual front wheels:** Available as an option. Enhances stability and increases braking performance.

### Brake System

Oil-enclosed, multiple disk brakes minimal parts, excellent heat rejection and improved serviceability. Fully hydraulic actuator circuits improve performance and reliability. Electronic monitoring system keeps operator informed of braking system.

**Service brake:** Four wheel hydraulic, fully enclosed, oil cooled multiple disk brakes. Two brake pedals allow standard braking and transmission neutralization braking.

**Parking brake:** Spring applied, oil-released, wet disk brake, transmission-mounted (can be retrofitted).

**Secondary brake features:** Operator can apply manually

### Hydraulic System

Third function hydraulics required (can be retrofitted).

Low effort fingertip implement control and command control steering; Premium quality lines and hoses; positive displacement hydraulic pumps. Optional automatic ride control (can be retrofitted) allows larger loads to be carried at greater vehicle speeds.

### Cycle times:

Lift from minimum to maximum	18 sec. (w/without load)
Opening of grapple	4.5 sec.
Closing of grapple	6 sec.

### Chassis

Caterpillar rear engine frame provides a sturdy and stable platform for engine, transmission and drive components. Box section front frame with heavy duty diagonal bracing features exceptional strength and reduced weight. Spread hitch design ensures extra strength and twist reduction at the critical articulation juncture.

### Mast, Carriage and Grapple

Mast employs unique design with diagonal bracing which transfers loads efficiently throughout the structure. The carriage tilts the grapple both forward and rearward independently of the mast, allowing much improved payload weight distribution, as well as easier loading and unloading. Grapple is designed for high strength and low implement weight, improving stability. Heavy duty cylinders and powerful hydraulics allow for powerful clamping and ejector functions.

### Electrical System

Well designed, reliable and maintenance friendly. Spare push buttons and circuits for expansion.

**CCS:** Computerised Control System with proportional joystick control.

**Operator's Control Panel :** Clear, functional and easy-to-read.

### Electrical System:

Operating voltage	24 volt DC
Battery voltage	2 x 12 volt DC
Battery capacity	2 x 140 Ah
Generator rating	2100/75 W/A

### Operator's Cab

Caterpillar 980G cab with integrated Falling Object Protective Structure (FOPS). Fully insulated for low noise level.

Right hand access required.

**Command Control steering:** Allows one hand operation of steering and transmission controls. Tilt and telescoping steering column.

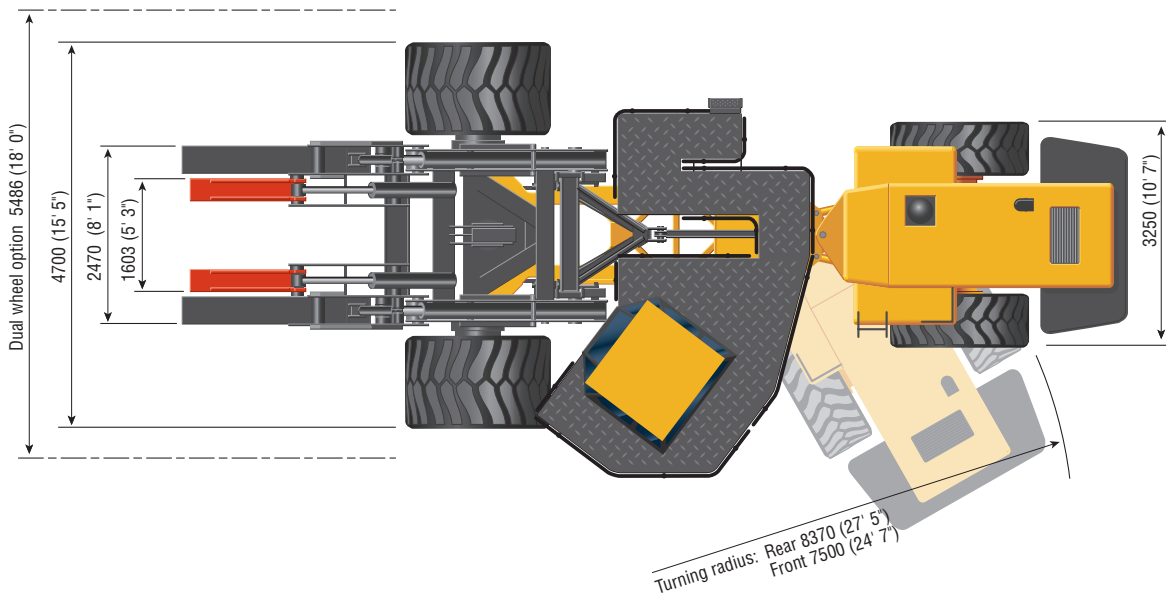
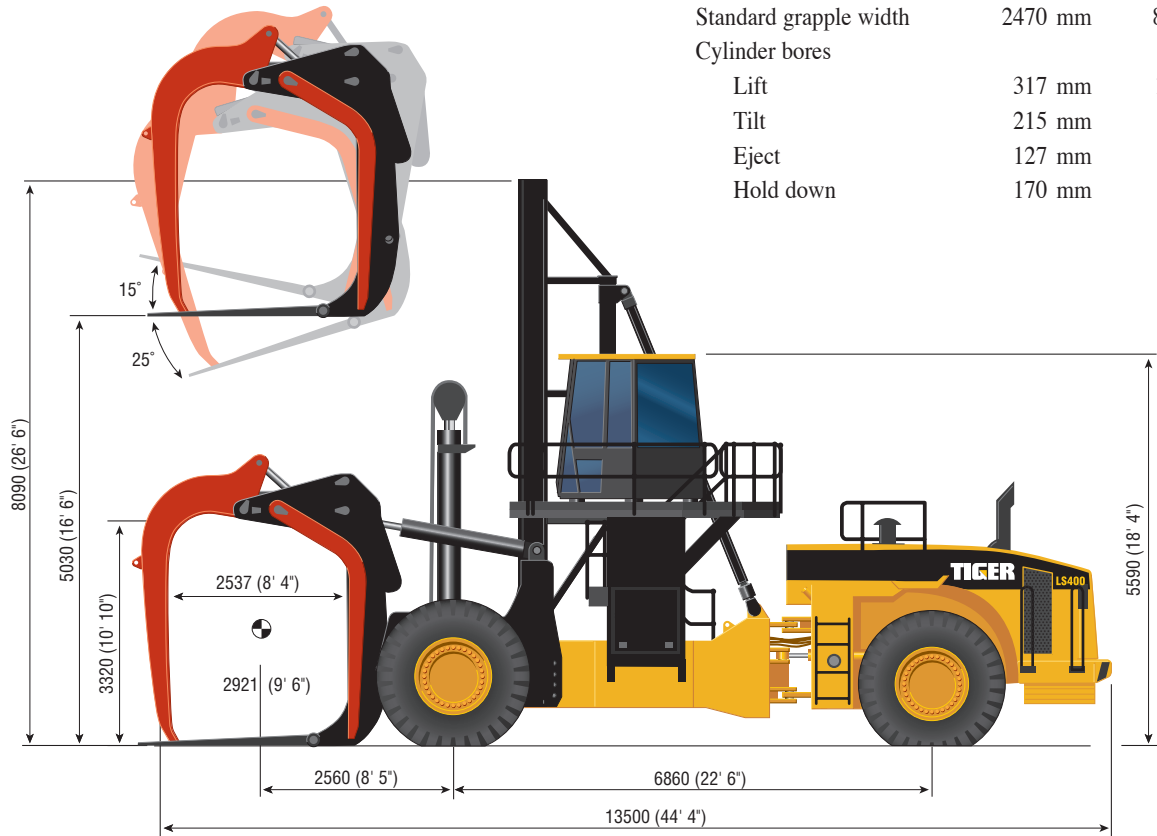
**Dual pedal braking:** Allows the left pedal to function as both a brake and also a transmission neutralizer. This allows engine RPM to be optimized for full hydraulic flow.

**Operator's seat:** 6-way adjustable, weight compensated, air suspension seat with large armrests. All control levers mounted on armrests in order to follow seat movement.

**Offset mounting:** Allows a clear sight line to carriage and grapple for precise, one pass loading and unloading

## Measurements, Capacities

Fuel tank	600 liters	159.5 gal.
Hydraulic oil tank	330 liters	87.2 gal.
Engine cooling system	79 liters	20.9 gal.
Crankcase	28 liters	7.4 gal.
Transmission	62 liters	16.4 gal.
Differential and final drive	81 liters	21.4 gal.
Standard grapple width	2470 mm	8' 1"
Cylinder bores		
Lift	317 mm	12.5"
Tilt	215 mm	8.5"
Eject	127 mm	5.0"
Hold down	170 mm	6.7"



# Tiger LS400 Equipment specifications



## Standard Conversion Components

Chassis	Fuel Tank
Mast	Hydraulic Control Groups
Carriage with Sliding Bearings and Auto Lube System	Hydraulic Lines Groups
Grapple with Fork, Clamp and Kickout tines	Brake Lines Groups
Front Wheels and Tyres	Heating and Air Conditioning Lines Group
Front Wheel Hubs and Brake Group	Ride Control Modification Group
Cab Riser, Walkways and Platforms	Wiring Group
Counterweights	Hitch Modification Group
LS400 Hydraulic Cylinders	Pin Groups
Lift Cylinder Roller Group and Chain Group	Operator Station Modification Group
Larger Diameter Steering Cylinders	Hydraulic Throttle Control Group
Hydraulic Tank	

## Optional Equipment

NoSpin Differential  
Pfreundt® Load Measurement System  
Grapple Position Kick Outs  
Customised Control Lever Layout  
Polycarbonate Windscreen



*Authorised manufacturers and distributors of Tiger wheel dozers and forestry equipment*

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