

OPERATING MANUAL (ANSI/CSA)

TELEHANDLERS

MODELS ZB2044

213530ABA July 2018

SKYJACK

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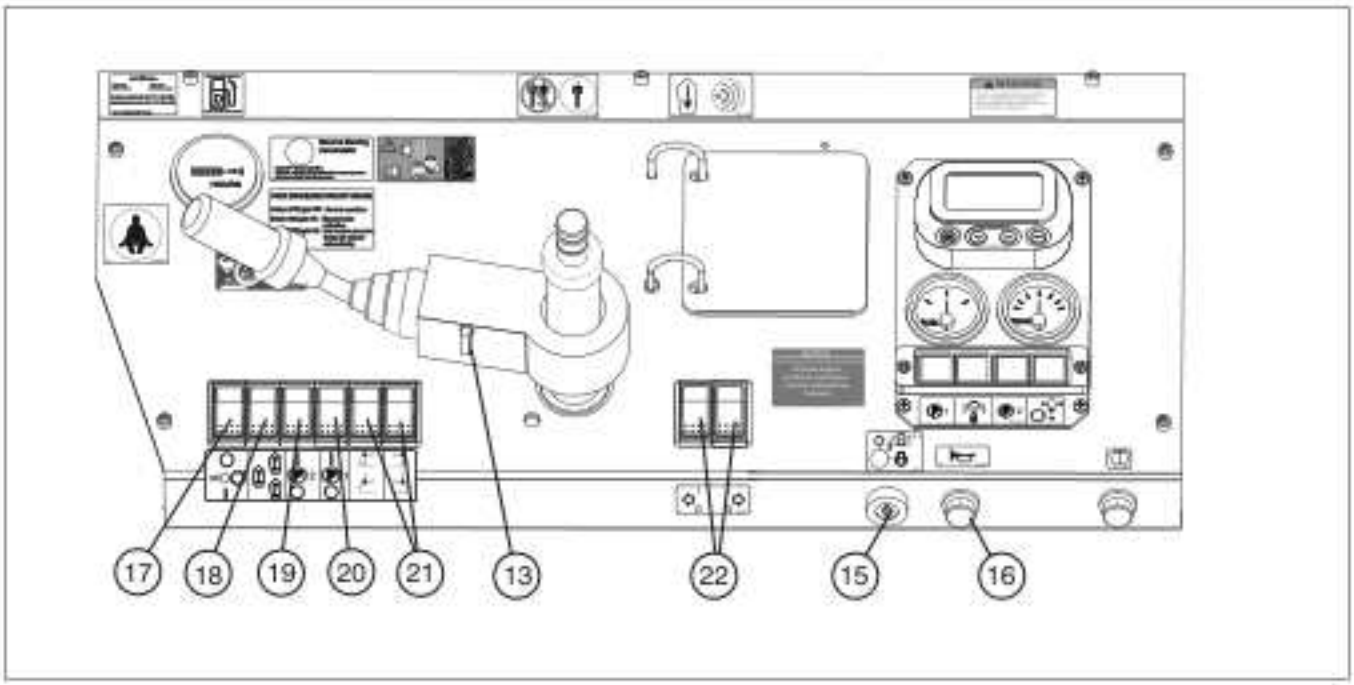
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15. **Ignition Switch** - This is a three-position, anti-restart switch.

    When in "○" off position, it turns the engine off and key can be removed. When in "|" on position, it provides power to ignition and auxiliary circuits. When in "|| " start position, it starts the engine; when released, key returns to "|" on position.

16. **Horn Button** - This button sounds an automotive-type horn.

17. **Transmission Disconnect Override** - This is a two-position rocker switch used for ramping operations only.

    Select rocker switch to forward "⌒" position for normal operation.

    While in this position, the transmission will return to neutral automatically upon application of the brake.

    Select rocker switch to backward "⌒" position when operating on a slope.

    While in this position, the transmission will remain in gear.

18. **Steer Mode Switch** - This switch has three positions to allow selection of round steer, front steer and crab steer. Refer to Section 2.10-4 for steering procedure.

19. **Parking Brake Switch** - This switch controls the application and release of parking brake.

20. **Secondary Park Brake Switch (If Equipped)** - This switch controls the application and release of secondary park brake.

21. **Left and Right Outrigger Switches (If Equipped)** - These momentary switches control extension and retraction of left and right outriggers.

    Select switches to forward "⌒" position to extend outriggers.

    Select switches to backward "⌒" position to retract outriggers.

22. **Left and Right Turn Signals (If Equipped)** - These rocker switches control left and right turn signals located on both the front and rear of the telehandler.

NOTE

Turn on both signals switches to use as emergency flashers.

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2.12-1 Examples on Reading the Capacity Chart

The Operator must verify that the capacity chart corresponds with both telehandler and attachment model number.

The following scenarios show various conditions the operator may encounter.

	Load Weight	Reach	Height	Boom Angle	Boom Extension	Capacity	OK to Lift
1	8,250 lb (3,742 kg)	16 ft (4.8 m)	33 ft (10 m)	46°	G	8,500 lb (3,860 kg)	YES
2	9,000 lb (4,082 kg)	18 ft (5.5 m)	22 ft (6.7 m)	34°	F	8,500 lb (3,860 kg)	NO
3	6,500 lb (2,948 kg)	14 ft (4.3 m)	2 ft (0.6 m)	-2°	D	10,000 lb (4,540 kg)	YES
4	13,750 lb (6,236 kg)	6 ft (1.8 m)	37 ft (11.2 m)	65°	F	12,000 lb (5,440 kg)	NO
5	7,925 lb (3,594 kg)	16 ft (4.8 m)	12 ft (3.6 m)	18°	D	8,500 lb (3,860 kg)	YES
6	14,450 lb (6,554 kg)	7 ft (2.1 m)	4 ft (1.2 m)	0°	B	15,000 (6,800 kg)	YES

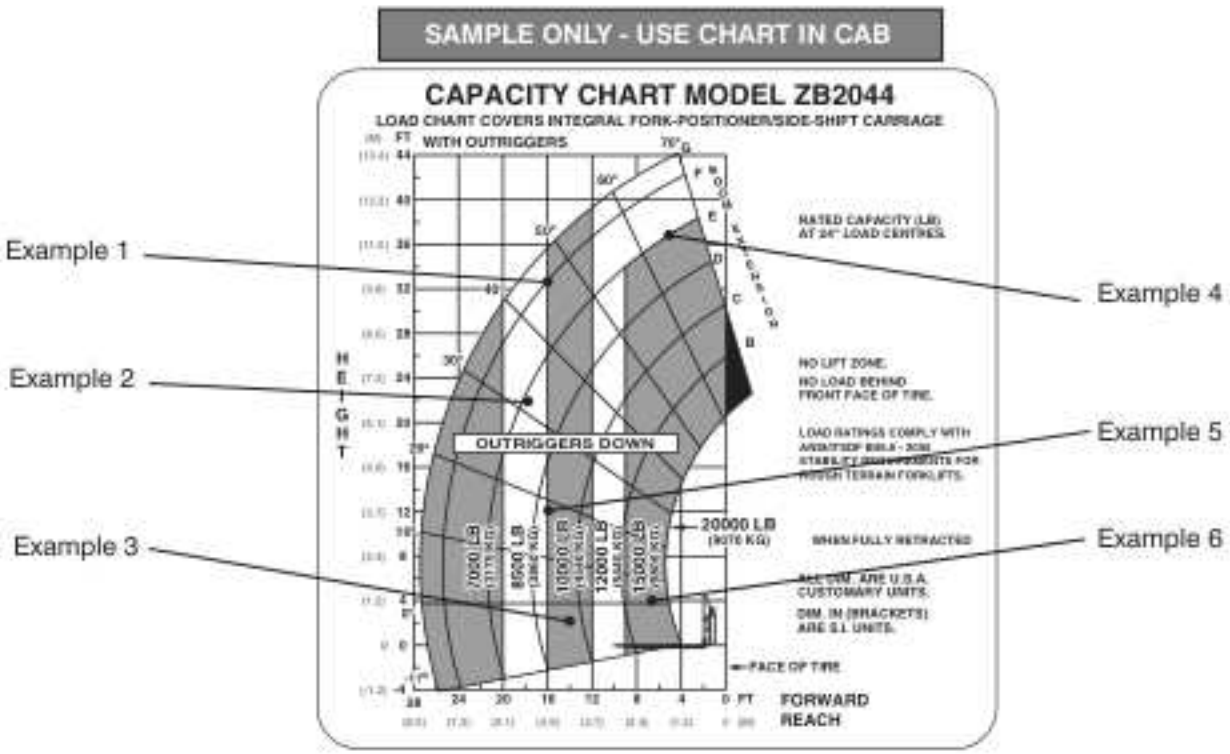


Figure 2-16 Capacity Chart Examples

NOTE

This is a sample capacity chart only! DO NOT use this capacity chart. Use chart inside cab.

NOTE

If the intersection occurs on a bold line separating the capacity regions, the smaller of the two capacity values must be used.

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General Maintenance

Before attempting any repair work, turn ignition switch to off position. Preventive maintenance is the easiest and least expensive type of maintenance.

Table 2.5 Maintenance and Inspection Schedule

Frequency	Daily	Weekly	Quarterly or 250 hours	Annually or 1000 hours
Visual and Daily Maintenance Inspections				
Labels	A		C* †	
Electrical	A			
Safety Switches	A			
Mirrors	A			
Hydraulic	A			
Cylinders	A			
Frame				
Wheel/Tire Assembly	A			
Drive Axle	A			
Steer Cylinder Assembly	A			
Steer Linkage	A			
Batteries	A			
Engine Air Filter	A			
Engine Coolant	A			
Muffler and Exhaust	A			
Engine Compartment	A			
Engine Oil Level	A			
Engine Coolant Level	A			
Fuel Leaks	A			
Hydraulic Pump	A			
Belts	A			
Fuel Tank	A			
Hydraulic Tank	A			
Hydraulic Oil	A			
Hydraulic Return Filter	A			
Boom				
Slide Pads	A			
Chain	A			
Boom Angle Indicator	A			
Proximity Sensor	A			
Transmission				
Lifting Attachments	A			
Grease Fittings				
Grease Fittings on Frame		B		
Grease Fittings on Boom Assembly		B		
Operator's Cab				
ROPS/FOPS	A			
Seat	A			
Pedals	A			
Manual	A			
Operator's Cab Controls	A			

Frequency	Daily	Weekly	Quarterly or 250 hours	Annually or 1000 hours
Function Tests				
Operator's Cab Controls			C* †	
Test Horn	A			
Test Reverse Alarm	A			
Test Lights	A			
Test Boom and Attachment Functions	A			
Test Frame Leveling and Level Indicator	A			
Test Frame Level Lock	A			
Test Accelerator Pedal	A			
Test Driving and Service Brake Functions	A			
Test Steering	A			
Test Parking Brake	A			
Test Outriggers (if equipped)	A			

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A - Perform Visual and Daily Maintenance Inspections & Functions Test. Refer to Section 2.7 and Section 2.8 of this manual.

B - Perform Visual and Weekly Maintenance Inspections & Functions Test. Refer to Section 2.7 and Section 2.8 of this manual.

C - Perform Scheduled Maintenance Inspection. Refer to Service manual.

*- Maintenance must be performed only by trained and competent personnel who are familiar with mechanical procedures.

† - Refer to Skyjack's website @ www.skyjack.com for latest service bulletins prior to performing quarterly or yearly inspection.

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Safety Precautions (Continued)

Know and understand all safety precautions before going on to the next section.

- **DRIVE UPHILL LOADED.** When holding a load, driving uphill decreases potential for load to slip out.



- **ALWAYS LEVEL FRAME** before elevating the boom



- **WHEN TRANSPORTING LOADS** fully retract the boom, keep the load low to the ground and forks tilted back slightly. This is the most stable position possible for the vehicle.



- **KEEP** forks close to the ground when in motion to increase telehandler stability and decrease potential for injury to others. When fully stopped, lower forks completely to the ground.



- **TILT** forks backwards slightly when traveling to decrease potential of load slipping off.



- **SECURE** loose loads with chains or straps to decrease potential of spills or injury to others.



- **TETHER LOADS** that may swing, keeping them close to the ground. Provide ample clearance for personnel to guide the load safely.



- **SLINGING LOADS** is acceptable only when the load is appropriately attached to a jib boom or the throat of a tilted fork, and the precautions outlined in Section 2.12 are followed.



- **BE AWARE** of the telehandler's travel envelope, especially when turning. Keep sufficient clearance at all times between the telehandler and any obstacles or people.



- **KEEP OTHERS AWARE** at all times during operation.



- **CHECK** lights (if equipped) for proper function before operating.



- **ENSURE ALL** tires are in good condition and lug nuts are properly tightened.



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Table 2.2 Specifications and Features

MODEL	ZB2044
Engine	
Type	Cummins QSB4.5
Max RPM	2500 rpm
Horsepower @ 2300 RPM	168 HP
Horsepower @ 2500 RPM	163 HP
Fuel type	Diesel
Transmission	
Type	DANA TS2000
Speeds forward	3
Speeds Reverse	3
Top Speed	20.5 mph (33 km/h)
Gear Ratios	
1st Gear	4.64 : 1
2nd Gear	2.23 : 1
3rd Gear	0.82 : 1
Electrical	
System voltage	12 volts negative ground
Standard Batteries	
Type	HP-31E
Quantity	2
Cranking amperes @ 0°F (-17°C)	725 A
Total cranking amps @ 0°F (-17°C)	1450 A
Cranking amperes @ 32°F (0°C)	1100 A
Reserve capacity	180 minutes
Dimensions	
Overall length (less forks)	243 in (617 cm)
Overall width	102 in (259 cm)
Overall Height	108 in (274 cm)
Curb weight (standard machine with open cab)	45,000 lbs. (20,000 kg)
Maximum capacity	20,000 lbs. (9,071 Kg)
Wheelbase	138 in (350 cm)
Round steer turning Radius (inside)	220 in (559 cm)
Boom	
Number of sections	3
Maximum lift height	44 ft. 10 in (1366 cm)
Maximum forward reach	27 ft 5 in (835 cm)
Standard Forks	2¾ x 6 x 60 in (6.9 x 15.2 x 152.4 cm)
Carriage rollback	19°
Carriage forward tilt	80°
Operating Times	
Boom extend (at max. boom angle)	13 seconds
Boom retract (at max. boom angle)	9.5 seconds
Boom raise*	19 seconds
Boom lower*	20 seconds
Carriage roll forward	12 seconds
Carriage roll back	12 seconds
Frame level right (stop to stop) **	15 - 20 seconds
Frame level left (stop to stop) **	15 - 20 seconds

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* Measured with boom fully retracted.

** Under no circumstances should the frame level cycle take less than 15 seconds to complete in either direction.

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