

# CONSTRUCTION 100HX 110HX

100' STRAIGHT BOOM 110' STRAIGHT BOOM EXTENDABLE AXLE

A high performance, extendable axle, telescopic boom lift designed for a wide variety of maintenance, construction and the most demanding high reach access applications.



The patented Extend-A-Reach increases operator versatility in positioning the work platform.

### **PLATFORM**

Standard 96" (2.44m) wide basket. Tubular, welded all-steel construction results in excellent durability. Wire mesh to midrail keeps tools and materials within confines of the platform. Steel grate floor is *skid-resistant* and *provides visibility* when lowering platform. Powered rotator is standard for flexibility in positioning platform. JLG's exclusive Load Management Indicator System is an audio/visual alert system to indicate allowable working capacities. Blue (1000 lbs. {454 kg}), yellow (500 lbs. {227 kg}), and red (non-working radius) lights indicate the allowable platform loads to 60' (18.3m) of horizontal reach at which point an interlock system prevents further extension without change in boom angle. A radius limiting system working through the boom telescope cylinder backs up the LMI.

### **ENGINE**

A 63 horsepower-rated gasoline powered Ford LSG-423 water-cooled engine for <u>efficient</u>, <u>powerful operation</u>, long service life and reduced maintenance. Precision governor control regulates idle to help <u>save fuel</u> and lower operating noise. Optional 76 hp air-cooled Deutz F4L912 industrial strength diesel engine provides ample horsepower and efficient, reliable service when diesel is the power source.

### **PLATFORM CONTROLS**

Low maintenance moisture resistant electric/hydraulic proportional controls provide smooth operation for Drive, Lift, Swing and Telescope. Ramping feature delays full power on and off for *smooth starts and stops*. A Creep or Inching Mode is toggle switch selectable to slow down proportional functions for more precise positioning situations. This mode



Complete machine operation is provided from the platform control station which includes the load management indicator system.

is automatically switched into in certain areas of the work envelope. Steer, Platform Rotator, Platform Leveling, Drive Speed, Engine Speed, Wheel Motor Speed, Ignition/Start, Auxiliary Power, Horn, Emergency Stop, 5 degree Slope Light and 110V AC Receptacle included. 12V DC <u>auxiliary power provides full function operation</u> for lowering in the event of main power loss.

### **GROUND CONTROLS**

Reciprocal control of boom functions allows <u>operation from ground</u> for maintenance or emergency lowering. Complete instrumentation includes Platform/Ground Selector Switch, Overrides for ground user control of Lift, Swing and Telescope, Keyed Master Switch, Ignition/Start Controls, Auxiliary Power. Indicator panel showing capacity range chart with Load Management Indicator lights is used for testing

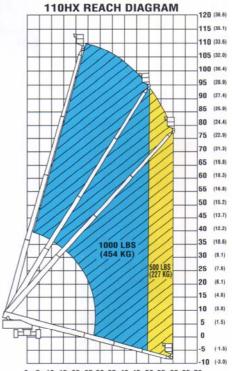
### **HYDRAULIC SYSTEM**

High flow three-section gear pump provides <u>substantial flow to allow multifunction machine operation</u>. Large volume, open center, vented reservoir enables constant recycling of hydraulic oil to <u>maintain low system temperature</u>. Proportional control valve provides <u>infinitely variable control</u> in direct proportion to platform control lever movement.

## **MACHINE SPECIFICATIONS**

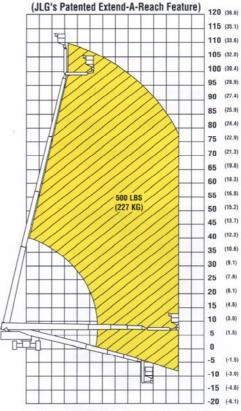
DIMENSIONS	110HX	100HX
	110 ft.	100 ft.
PLATFORM HEIGHT	33.54m	30.49m
WORKING HEIGHT	116 ft.	106 ft.
	35.37m	32.32m
PLATFORM DIMENSIONS-STD.	36" x 96" x 44"	36" x 96" x 44"
	.91m x 2.44m x 1.11m	.91m x 2.44m x 1.11m
PLATFORM (restricted) CAPACITY (unrestricted)	1000 lbs. (454 kg.)	1000 lbs. (454 kg.)
	500 lbs. (227 kg.)	500 lbs. (227 kg.)
STOWED LENGTH	38 ft., 7 in.	36 ft., 2 in.
	11.80m	11.00m
STOWED HEIGHT	9 ft., 10 in.	9 ft., 10 in.
	3.00m	3.00m
WIDTH (axles retracted) (axles extended)	8 ft. 6 in. (2.59m)	8 ft. 6 in. (2.59m)
	10 ft. 10 in. (3.30m)	10 ft. 10 in. (3.30m)
TAILSWING (axles retracted) (axles extended)	48 in. (1.22m)	48 in. (1.22m)
	34 in. (.86 m)	34 in. (.86 m)
GROSS WEIGHT (approx)	(1) 40,500 lbs.	(1) 37,000 lbs.
	18371 kg.	16783 kg.
ENGINE (gas) (diesel)	63 HP @ 2800 rpm	63 HP @ 2800 rpm
	76 HP @ 2400 rpm	76 HP @ 2400 rpm
MAIN PUMP OUTPUT	39 gpm @ 2800 rpm	39 gpm @ 2800 rpm
	147.6 L/min.	147.6 L/min.
AUXILIARY PUMP OUTPUT	4.75 gpm	4.75 gpm
	18 L/min.	18 L/min.
IIVDDAIII IO TANK GADAGITY	55 U.S.	55 U.S.
HYDRAULIC TANK CAPACITY	208.2 L	208.2 L
FUEL TANK CAPACITY	26 U.S. gals.	26 U.S. gals.
	98.4 L	98.4 L
TRAVEL SPEED	2.8 mph	2.8 mph
	4.5 km/hr	4.5 km/hr
GRADEABILITY	20% on hard surface	20% on hard surface
TURNING (axles retracted)	22 ft., 10 in. (9.96m)	22 ft., 10 in. (6.96m)
RADIUS (outside) (axles extended)	24ft., 0 in. (7.32 m)	24 ft., 0 in. (7.32 m)
HORIZONTAL REACH	60 ft. 0 in.	60 ft. 0 in.
	18.29m	18.29m
TIRES (Foam Filled)	15 x 22.5	15 x 22.5
WHEELBASE	132 in.	132 in.
	3.35m	3.35m
GROUND CLEARANCE	11 in.	11 in.
	29.7cm	29.7cm

(1)GVW may increase to meet country standards or with the addition of optional equipment

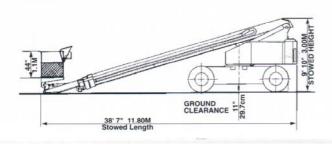


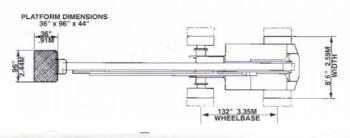
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 (1.5) (3.8) (4.8) (6.1) (7.8) (3.1) (10.8) (12.2)(13.7) (15.2) (16.8) (16.3) (18.1) (18.8) (21.3) REACH IN FEET/METERS FROM AXIS OF ROTATION

### 100HX+10 REACH DIAGRAM



### 110HX SHOWN





### **OPTIONAL EQUIPMENT**

Dual Fuel (LP/Gasoline), F4L912 Deutz Diesel Engine, Extend-A-Reach (100 HX only), Worklights Package, Hostile Environment Kit, Travel Alarm, Rotating Beacon, Cold Weather Package and CSA and EN280 European Packages.



Large 96" (2.44m) wide basket and powered hydraulic rotator are standard equipment for improved worker productivity.

### **EXTEND-A-REACH**

JLG's patented Extend-A-Reach option is a ten-foot (3.05m) articulating boom section attached to the end of the fly boom of the 100 HX. The main feature of this extension arm is its ability to articulate 15 degrees above or 80 degrees below horizontal of the main boom. The Extend-A-Reach option gives the operator the benefit of "up and over" or "out and down" access in areas where a straight boom would encounter interference with such obstacles as structural steel framework, aircraft tailsections, dock areas and overhead duct work. Articulation is accomplished by a solenoid valve actuated hydraulic cylinder enclosed within the extension tube. Platform leveling is accomplished through a master slave cylinder combined with a pantographic link attaching the platform to the fly boom.

SPECIFICATIONS	100HX	100HX+10
MAXIMUM HEIGHT	100 ft.	110 ft. 0 in.
	30.5m	33.5m
MAXIMUM REACH	60 ft. 0 in.	60 ft. 0 in.
	18.3m	18.3m
BELOW GROUND REACH	2 ft. 1 in.	12 ft. 0 in.
	.63m	3.66m
STOWED LENGTH	36 ft., 2 in.	44 ft. 2 in.
	11.0m	13.5m
BOOM ANGLE (above horiz.) (below horiz.)	75°	75° +15° ART.
	-14°	-14° -80° ART.
PLATFORM (unrestricted) CAPACITIES (restricted)	500 lbs. (227 kg)	500 lbs. (227 kg)
	1000 lbs. (454 kg)	
PLATFORM SIZES (standard)	36 in. x 96 in.	36 in. x 72 in.
	.91m x 2.44m	.91m x 1.82m
GROSS WEIGHT (approx)	(1) 37,000 lbs.	(1) 39,600 lbs.
	16,783 kg	17,962 kg

 GVW may increase to meet country standards or with the addition of optional equipment



The Extend-A-Reach option articulates 15° above or 80° below horizontal of main boom to give operator "up and over" or "out and down" access.



High strength steel boom sections, steel power tracks with self lubricating discs and chain extend/retract system are just a few of the features standard on

### **BOOM**

Boom sections are manufactured from high strength alloy steel plates with heavier plates used for top and bottom boom assembly. The plates are fixtured and welded simultaneously on an automatic four-headed welding machine. The result is a durable boom with minimal deflection, long service life and an optimum strength-toweight ratio. The four section power telescoping design includes a lower midsection operated by a double-acting hydraulic cylinder with loadholding valve. Fly section

and upper midsection is driven by heavy-duty industrial chain. The chain extension/retraction system is a JLG exclusive and features heavy-duty leaf-type chain. Chain has proven to be a more durable and reliable performer than cable, and requires significantly less adjustment. Self-lubricating discs enable smooth extension and retraction for the powertracks which are externally mounted for easy inspection and maintenance of hoses and electrical cables.

### TURNTABLE/FRAME

Planetary speed reducer driven by hydraulic motor provides 360 degree continuous rotation. Multiple disc brake is spring-applied, hydraulically released. Slip-through feature reduces risk of damage to boom and swing components. An extendable axle design permits a narrow retracted chassis width of 8' 6"

(2.59m) for transport and for maneuverability when entering tight corridors. Axles are hydraulically extendable from the platform to their 10' 10" (3.30m) maximum width. *Interlock* system prevents boom from being raised above horizontal without axles being extended. A light in the control panel indicates that the axles have been set. Extendable axles help reduce overall machine GVW over fixed axle designs which increases machine mobility and decreases wear on system components.



Extendable axles help reduce overall machine GVW over fixed axle designs which increases overall machine mobility and transportability and decreases wear on system components.

### **DRIVE SYSTEM**

Planetary gear reduction on rear wheels is driven by two-speed reversible hydraulic motors. Flow-divide hydraulic system maintains pressure for increased grade-climbing capability. Automatic spring-applied, hydraulically released disc brakes on all drive wheels.



PERFORMING AT A HIGHER LEVEL

# THE BEST **PROTECTION**



The JLG ONE&FIVE Warranty covers the entire machine for one full year and all specified major structural components for five full years. This warranty--the industry's best--represents JLG's commitment to superior quality standards.

### SERVICE AND SUPPORT **NEARBY... IN EVERY CORNER OF THE WORLD**

Along with a high level of engineering expertise, you can depend on JLG's commitment to customer satisfaction. We ship 90% of in-stock parts orders received from JLG distributors within a 24-hour period--a level of service envied by most access and lift equipment manufacturers. Service support is available from factory-trained specialists throughout our extensive distributor network.

Due to continuous product improvements, we reserve the right to make specification and/or equipment changes without prior notification.

This machine meets or exceeds applicable OSHA Regulations in 29 CFR 1910.67. 1926.451,(f) 29 CFR 1926.556, ANSI A92.5-1980, as originally manufactured for intended applications.

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