# LIFTMOORE 4000 CRANE

For those lifting jobs requiring more mid range capacity, Liftmoore's model 4000 crane is the answer. With its 16,000 Ft-Lb. moment rating and 4,000 Lb. maximum capacity at 4 Ft. the 4000 provides the extra strength needed. The 4000 is designed for 11,000 GVWR and larger trucks.

This 12-volt electric crane includes a remote pendant for one-man control of its operation. Power boom elevation, power extension, power rotation and power hoist winch are standard.

Available with two standard boom lengths

 4000X-16 Power extension from 8 Ft to 12 Ft with a manual pull out to 16 Ft.

• 4000X-20 Power extension from 10 Ft to 16 Ft with a manual pull out to 20 Ft.



Remote Pendant

Control

Model 4000X-16 **Shown** 

# LOAD CAPACITY - LBS. 16,000 FT-LBS

15° 30° 45° 60° 75°

**BOOM LENGTH - FT** 2000 2051 2319 2759 4000 4000 1600 1656 1848 2263 3200 4000 1333 1381 1540 1885 2667 4000 1143 1183 1320 1616 2286 4000 1000 1036 1154 1415 2000 3865 889 920 1026 1257 1778 3434 20 800 - 828 - 924 - 1131 - 1600 - 3091



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Hydraulic Motor F/Power Rotation

**Planetary Gear** 

Winch

**Tapered Roller** Bearings.

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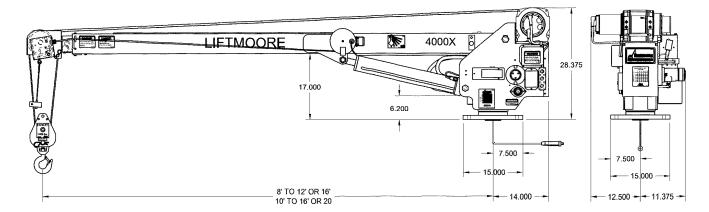
Electric

Pump

**Hydraulic** 

IFTMOORE **RUCK CRANES** 

# **4000 SPECIFICATIONS**



#### **MOMENT RATING:**

16,000 Ft.-Lbs.

#### **HOIST WINCH:**

The hoist winch has a planetary gear drive for best possible efficiency. A 2.7HP permanent magnet electric motor powers the winch. Single line capacity of the winch is 2000 Lbs. The load is controlled by a load apportioned mechanical brake located in the winch drum. Ratio between winch drum and wire rope meets ANSI B30.5 requirements.

First layer performance of the winch is as follows:

Load- Lbs	Hook Speed- Ft/ Min.	Electrical- Amps @ 12VDC
1000	13.9	64
2000	11.9	115

Note: Two part line required for loads above 2000Lbs.

#### **WIRE ROPE and SHEAVES:**

The crane is supplied with 75 Ft. of ¼ in. galvanized aircraft cable. Minimum breaking strength of the rope is 7000 lbs. The wire rope is outside of the boom and visible for operators continual inspection. A traveling block for easy two-part hookup is included. All sheaves meet ANSI requirements.

#### BOOM:

The boom is capable of moving from-5 to +75 Degrees. A double acting cylinder with an integral counterbalance valve elevates the boom. The counterbalance valve has two important functions. This valve holds the cylinder in the event of hose failure and it controls the rate of boom decent.

There are two standard Booms available on the model 4000X crane.

#### 4000X-16:

The boom extends under power from 8 Ft. to 12 Ft with a 4-Ft. manual pull out to 16 Ft. with one intermediate position at 14 Ft.

#### 4000X-20:

The boom extends under power from 10 Ft. to 16 Ft. with a 4-Ft manual pull out to 20 Ft. with one intermediate position at 18 Ft.

#### **HYDRAULIC SYSTEM:**

A hydraulic pump driven by a 12 volt D.C. series wound electric motor powers the crane's rotation, elevation and extension functions. The pump is a gear type with a 1.3 GPM capacity at 500 PSI. Control of the hydraulic functions is through four way spring centered solenoid activated valves. Valves have manual over-ride capability and are mounted on a manifold for easy access.

#### **ROTATION SYSTEM:**

The hydraulic powered rotation is driven by a low speed, high torque hydraulic motor and drives through a 54:1 ratio self locking worm gear. The worm gear is an aluminum bronze alloy. The worm is hardened steel. The crane rotates 360 degrees continuously without limit on two 4" ID tapered roller bearings.

#### **REMOTE PENDANT CONTROL:**

A 25-Ft. long remote pendant is provided for control of each powered function. The pendant control is removable from the crane to prevent unauthorized use of the crane. An E-Stop is included that turns off all power to the crane as required by OSHA.

## **LOAD SENSOR**

A load-limiting sensor is supplied as standard. This sensor will shut down hoist up, boom out & boom down when an overload is detected. The sensor will reset after the load is lowered.

#### **ANTI TWO-BLOCK:**

Anti two-block is standard on this crane and prevents extending the boom against the travel block and breaking the cable.

#### **POWER SOURCE:**

Crane is powered by the truck's 12 volt DC system. A second battery is required to keep the voltage as high as possible and should be installed in parallel with the vehicle's battery. A Group 31 "DEEP CYCLE" battery is recommended. 25 Ft of # 1 battery cable with quick disconnect is included along with a 3-ft ground wire, 150amp circuit breaker and master cut off switch.

### MOUNTING: A minimum 14,500 Lb. GVWR recommended.

Four 0.75" X3.0" long Grade 8 hex head cap screws and lock nuts are provided. Mounting plate is 15" square with a 12" square bolt pattern.

### **OUTRIGGERS:**

An optional outrigger is needed for stability requirements of OSHA 1910.180. The outrigger is necessary to reduce the load on the crane's rotation mechanism and the truck's suspension.



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