

## SUGGESTED SPECIFICATIONS LIFTMOORE MODEL 5080X and 5080XP CRANES

**CAPACITY:** 50,000 Ft.– Lbs. moment rating with capacities as follows:

\*8000 Lbs. at 6 Ft.  
\*6250 Lbs. at 8 Ft.  
\*5000 Lbs. at 10 Ft.  
\*4166 Lbs. at 12 Ft.  
3125 Lbs. at 16 Ft.  
2777 Lbs. at 18 Ft.  
2500 Lbs. at 20 Ft.

\* Use traveling block double line for loads above 4000 Lbs.

**HOIST WINCH:** The hoist winch is a worm gear design with a 38:1 gear ratio. The safety brake includes a one way clutch that releases the brake when lifting the load. The winch drum to wire rope is 17:1 as required by ANSI. The winch is powered by a low speed, high torque hydraulic motor. The line speed is 19 FPM with 6 GPM input. The hoist winch is mounted on the boom.

**WIRE ROPE AND SHEAVES:** The crane is supplied with 95 Ft. of 3/8 In. 7 x 19 galvanized aircraft cable. The minimum breaking strength of the cable is 14,400 Lbs. and meets ANSI requirements. The wire rope is outside of the boom and clearly visible for operator's inspection. A 4 ton swivel traveling block assembly with a roller thrust bearing and safety latch is included. ALL sheaves include cast bronze bearings with grease zerts for lubrication.

**HYDRAULIC SYSTEM:** All crane functions are hydraulically powered by an engine driven hydraulic pump. The PTO, pump, reservoir and hoses are not supplied with the crane. Flow and pressure requirements are 6 GPM and 2750 PSI. For smooth operation and minimum heat buildup, a pressure compensated flow control system is used. The system will not build up pressure above the level required to operate a function. This reduces the heat buildup in the oil and the power required from the engine. A parallel control circuit is used.

Proportional hydraulic control is available as an option (model 5080XP). This control system gives the operator of the crane variable speed control of each function. All functions are controlled through the remote pendant. Manual override control is provided for directional control of each hydraulic function.

**ROTATION:** Rotation is 360 degrees continuous and unlimited. A gear bearing supports the crane. Crane rotation is powered by a 45:1 ratio worm gear box with an integral low speed, high torque hydraulic motor. The rotation will be restricted on models with auxiliary electric controls.

**BOOM ELEVATION:** A 4.5 In. bore hydraulic cylinder elevates the boom from – 5 degrees to + 75 degrees. A counterbalance valve is mounted integral with the cylinder. This valve has three vital purposes. It will hold the load in the event of a hose failure, control the rate of descent when powered down, and relieve the cylinder from high pressure.



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**BOOM EXTENSION:** The boom is extended hydraulically from 10 Ft. to 16 Ft. by a 3 In. bore hydraulic cylinder and is extended manually from 16 Ft. to 20 Ft. The extension cylinder is mounted inside the boom for protection. For safety, a counterbalance valve is mounted in the cylinder. The power extendable portion of the boom slides on nylatron slide pads for minimum friction.

**CONTROLS:**

- X** Cranes with on /off hydraulic systems are supplied with a 25 Ft. remote pendant control. For safest possible use, the pendant control is removable from the crane and each function is controlled by a momentary contact toggle switch. (**optional** wireless controls available)
  
- XP** Cranes with proportional hydraulic systems are supplied with Kar-Tech Guider wireless controls which allows the operator freedom of movement without the constraints of a wired control system. (Optional engine controls available)

**LOAD SENSOR:** A load limiting sensor is installed in the elevation cylinder. This sensor will shut down hoist up, boom out, and boom down when an overload is detected. The sensor will rest after the load is lowered.

**ANTI-TWO BLOCK:** The crane includes an anti-two block feature that prevents extending the boom against the traveling block and breaking the cable.

**MOUNTING:** Four 1 In. grade 8 bolts are required. The base plate is drilled on a 14.75 In. square pattern. These bolts are not supplied with the crane.

**ACCESSORIES:** An outrigger is necessary to keep the truck as level as possible as well as reducing the load on the crane's rotation mechanism and the truck's suspension components. Jackstands are also available for stability of the truck. A boom rest is required to support the crane while the truck is in motion. Liftmoore can supply all of these options.

**CHASSIS:** Minimum recommended chassis for mounting the 5080 is 20,000 Lbs. GVWR.

