

HOUSTON, TEXAS WWW.LIFTMOORE.COM  
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FAX: (800) 824-5559 (USA & CANADA)

# Installation Instructions

## Model 5000 & 6036 Series

12 VOLT

P/N 22434

### **! ATTENTION !**

KEEP THIS MANUAL WITH THE CRANE. OPERATION INSTRUCTIONS ARE CONTAINED IN A SEPARATE MANUAL. NEW OPERATORS SHOULD READ AND BE FAMILIAR WITH THE OPERATING INSTRUCTIONS BEFORE OPERATING THIS CRANE.

ORDER PARTS USING PART NUMBER, CRANE MODEL NUMBER AND CRANE SERIAL NUMBER TO ASSURE ACCURACY OF ORDERS.

# MODEL 5000 & 6036 INSTALLATION INSTRUCTIONS

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F900-G  
6/17/13

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## MODEL 5000 & 6036 INSTALLATION INSTRUCTIONS

Read and understand this complete section before starting the crane installation.

Before installing make sure you have all necessary parts. Please refer to the Owner's manual Section 4-1 for the list of parts required for installation. Report any shortages to Liftmoore, Inc. immediately.

1. The mounting surface for the crane must be capable of supporting the rated moment and maximum load of the crane as listed below:

5000W - 25,000 Ft.-Lbs.; 5,000 Lbs.  
6036WX - 34,000 Ft.-Lbs.; 6,000 Lbs.

2. Layout the mounting holes for the crane as shown in the drawing No. 31556 in this manual. Cut the center hole for the crane swivel as shown on the drawing. On cranes with auxiliary controls the rotation is restricted by a lever located on the base plate. Locate this rotation stop opposite the point where the boom will be restricted. Mount the crane with four 7/8" bolts of at least Grade 8 quality.
3. A manual disconnect switch with mounting bracket and terminals is provided with the crane. This switch will act as the main power disconnect for the crane. Removing power from the crane during periods of non-use will help to increase the life of the crane's electrical components. The switch should be mounted as near as possible to the crane and in a position which will facilitate its use. Determine the appropriate mounting position for the switch and use the supplied terminals to splice in to the crane's main power cable. Drawing No. 50377 illustrates how to install the disconnect switch and circuit breaker.
4. To achieve the rated load of this crane a second battery needs to be installed in the vehicle as close as possible to the crane. This keeps the line loss (voltage drop) to a minimum and adds to the life of the crane's electrical components. Connect all batteries using the 1/0 cable and make sure that each battery has the additional ground wire to the vehicle's frame.

The second battery near the crane should be a Group 4D or larger battery. Longer life of the battery will result if a "Deep Cycle" battery is installed. An example of this is a Douglas 12V 215 sweeper battery. This battery has a 215 Amp-Hour rating and is commonly used in industrial sweepers.

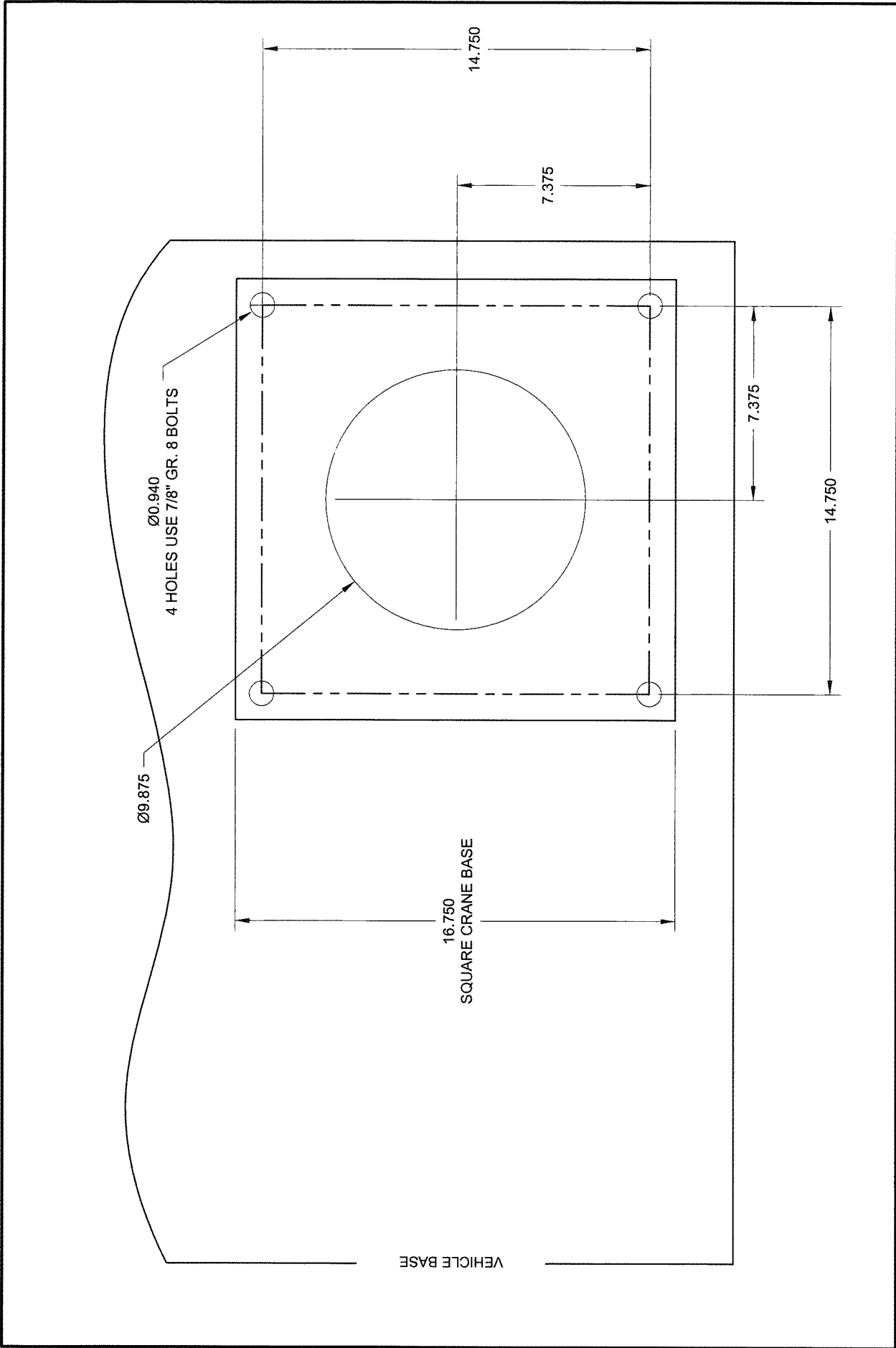
5. Install the circuit breaker, which is supplied with the crane, near the battery on the positive line. This breaker is to protect the battery in event of an accidental grounding or shorting of the positive wire, (SEE DWG. 50377) for breaker installation. Use a section of the wire and the terminals supplied to connect between the battery and the circuit breaker. See drawing No. 50377.
6. Run the 1/0 battery cable, which is provided with the crane, along the inside of the chassis frame to the positive battery terminal and connect it to the battery using a universal or marine type wing nut lug terminal. Make sure that the cable is protected avoiding sharp edges and heat sources such as the muffler or catalytic converter. Use loom for protection whenever the cable passes through the body.



## MODEL 5000& 6036 INSTALLATION INSTRUCTIONS, Cont.

7. Run the extra ground wire supplied from the negative battery terminal to the truck's main frame. Leave the regular ground to the engine as is. The end of both wires can be clamped together using a universal type battery connector. This ground must be in place to protect the truck's wiring and for efficient operation of the crane. A good ground must exist for the crane to work. This ground wire should be run for all batteries on the vehicle.
8. A boom support is required for this crane. For bodies shorter than 132", place the support so that the traveling block hook is secured and does not block the truck cab door. On boom rests supplied by Liftmoore the boom is held down by tension on the hoist wire rope.
9. An outrigger must be installed to keep the crane as level as possible under all expected working conditions. Keeping the crane level reduces the loads on the rotation gear. This will also protect the truck's springs, axle and wheels when heavy loads are suspended from the crane. OSHA requirements require a stability test be performed on this installation. A method for performing this test can be found following these instructions. If the installation does not pass the stability test contact Liftmoore for information on derating the crane in the unstable areas.
10. Extra rear spring leaves, heavy coil springs or other devices may be needed to keep the truck level when the crane is mounted on corner or off center locations.
11. Suggested installation drawings are available upon request.
12. When operating the crane for the first time, run the cylinders through their full extension cycle to purge any air from the cylinder. Operate the crane to assure complete operation of all functions.
13. Verify that the anti two-block will stop extension out and winch up when the weight on the device is lifted by either function. Make sure that the weight is on the live or running wire rope. The Crane Assembly drawing in the owner's manual Section 4-2 illustrates how the weight should be installed on the line.
14. Place these instructions and the Owner's Manual with Operating Instruction's in a convenient place for the user to find and use before operating the crane.
15. Load Chart Decal # 25013 for the 5000 or Load Chart Decal # 25049 for the 6036 is to be placed on the truck body for easy visibility by the user.



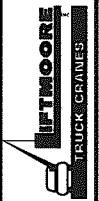


DRAWING NO.  
31556-C

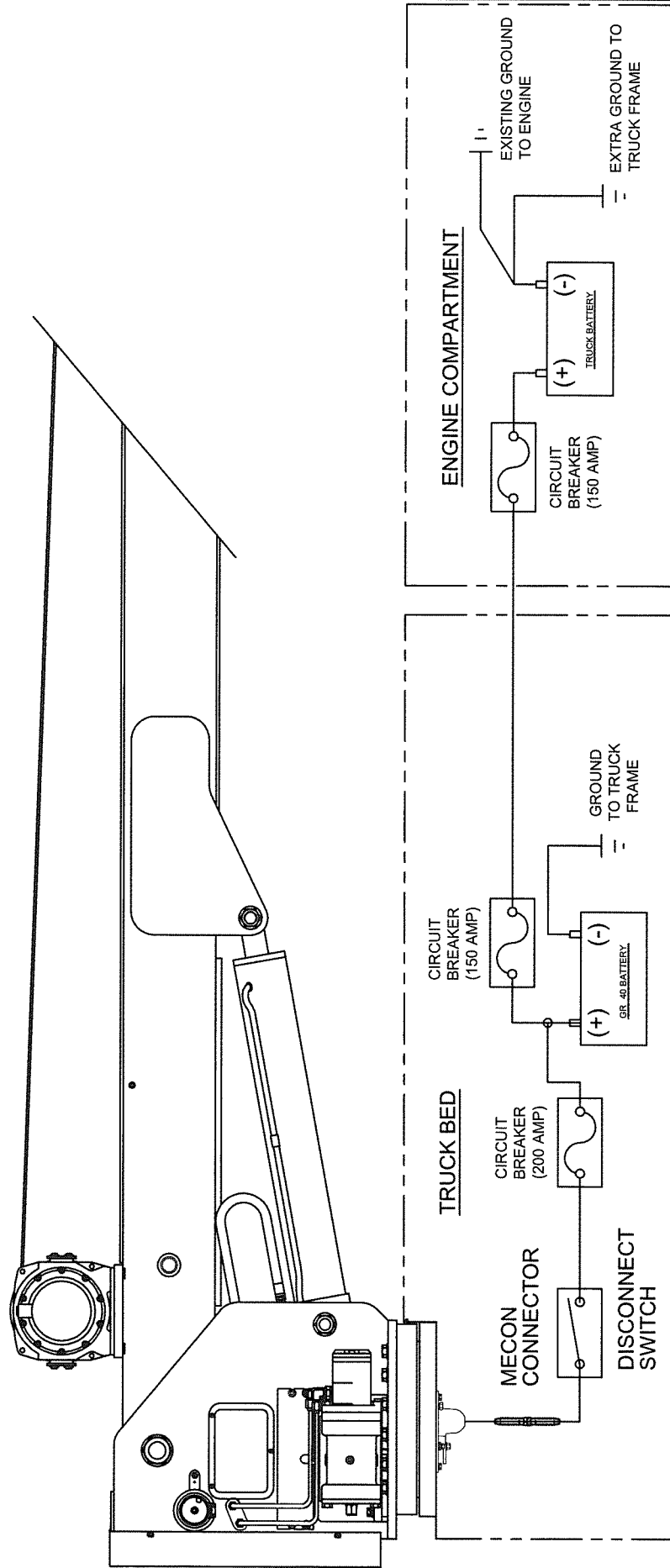
MOUNTING PATTERN FOR  
5000/6036

DRWN BY: JC  
DATE: 9/11/08

Houston TX  
(713)-688-5533  
www.lifmoore.com



SUGGESTED WIRING SCHEMATIC FOR 5000 & 6036 CRANE INSTALLATION:



Houston TX  
 (713)-688-5533  
 www.liftmoore.com

DRWN BY: JE  
 DATE: 6/17/13

SCHEM, CRANE 5000/6036 ELEC. INSTAL-ELEC  
 FOR ELECTRIC CRANES

DRAWING NO.

50836-0



## VEHICLE STABILITY TEST

12/6/12

OSHA requires a stability test be completed by the installer. A qualified person shall perform this test. Please call Liftmoore for any assistance required in completing this test.

### Test Preparations:

- Use as level of a test site as possible.
- Engage parking brake on vehicle.
- Set outriggers, jackstands, or other stability device in place.
  - Vehicle tires should remain in contact with the ground.
  - The vehicle should be level.

### Fill out test form:

- Complete the vehicle and crane data at the top of Page 2 of this form.
- Use a known weight to determine the *Testing Load Radius*.

### Test Procedure:

#### **Determine Area W1 Length**

1. With the crane extended to the *Testing Load Radius* over the rear of the truck, lift the load. Keep the load less than 4" off of the ground.
2. Rotate the load counterclockwise. Monitor all vehicle tires to ensure they remain in contact with the test surface.
3. When one of the vehicle's tires breaks contact with the ground, stop the rotation.
4. Use a protractor to determine this angle. Write this angle on the **Stability Test Results** as *Area Y*.
5. Keeping the load off of the ground, retract or elevate the boom until all tires are in contact with the test surface.
6. Continue rotating the load counterclockwise while monitoring all vehicle tires.
7. When one of the vehicle's tires breaks contact with the ground, stop the rotation.
8. Keeping the load off of the ground, retract or elevate the boom until all tires are in contact with the test surface.
9. Repeat this procedure until either the vehicle prevents further rotation or a 180 degree rotation of the load is reached.
10. Record the load radius in feet at this point on the **Stability Test Results** as *Area W1 Length*.

#### **Determine Area W2 Length**

11. Return the load to the rear of the vehicle and extend the load to the *Testing Load Radius*. Keep the load less than 4" off of the ground.
12. Rotate the load clockwise. Monitor all vehicle tires to ensure they remain in contact with the test surface.
13. When one of the vehicle's tires breaks contact with the ground, stop the rotation.
14. Use a protractor to determine this angle and write this angle on the **Stability Test Results** as *Area Z*.
15. Keeping the load off of the ground, retract or elevate the boom until all tires are in contact with the test surface.
16. Continue rotating the load clockwise while monitoring all vehicle tires.
17. When one of the vehicle's tires breaks contact with the ground, stop the rotation.
18. Keeping the load off of the ground, retract or elevate the boom until all tires are in contact with the test surface.
19. Repeat this procedure until either the vehicle prevents further rotation or a 180 degree rotation of the load is reached.
20. Record the load radius in feet at this point on the **Stability Test Results** as *Area W2 Length*.

#### **Record Stability Test Results on Placard**

21. Record the information from the **Stability Test Results** on the **CRANE TRUCK STABILITY** plate (P.N. 18600) and install the plate in a visible position on the vehicle, preferably near the crane.

THIS TEST IS NOW COMPLETE

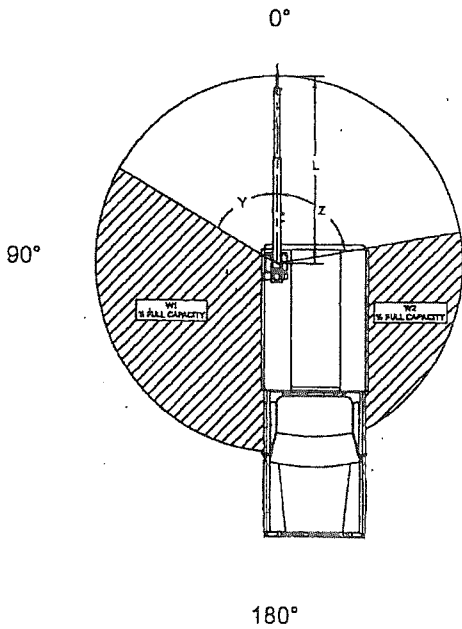
## STABILITY TEST FORM

Operational limits of this vehicle

VEHICLE INFORMATION	CRANE INFORMATION
Year _____	Model _____
Make _____	Serial Number _____
Model _____	Moment Rating (ft-lbs.) _____
VIN _____	

Determine The *Testing Load Radius* by using the following:

Moment Rating (ft-lbs.) \_\_\_\_\_  
 Multiply by 1.18 x \_\_\_\_\_  
 Divide by known weight + \_\_\_\_\_  
*Testing Load Radius* (ft.) = \_\_\_\_\_



**Area W1 Length** \_\_\_\_\_  
**Testing Load Radius** (ft.) + \_\_\_\_\_  
 Multiply by 100 x \_\_\_\_\_  
 W1 % Rated Capacity = \_\_\_\_\_

**Area W2 Length** \_\_\_\_\_  
**Testing Load Radius** (ft.) + \_\_\_\_\_  
 Multiply by 100 x \_\_\_\_\_  
 W2 % Rated Capacity = \_\_\_\_\_

STABILITY TEST RESULTS	
Area Y:	_____ Degrees
Area Z:	_____ Degrees
Area W1 Rated Capacity:	_____ %
Area W2 Rated Capacity:	_____ %

Test performed by: \_\_\_\_\_

Date: \_\_\_\_\_