

## MOBILE CRANE LOAD TEST

EQUIPMENT NO. \_\_\_\_\_ MAKE \_\_\_\_\_ DATE \_\_\_\_\_

SERIAL NO. \_\_\_\_\_ BNL INSPECTION TAG NO. \_\_\_\_\_

HOUR METER-ODOMETER TOTAL \_\_\_\_\_ RATED CAPACITY \_\_\_\_\_

### LOAD TEST INSPECTION REPORT

The following checklist identifies the items to be inspected prior to the load test. Any unusual conditions observed during the inspection should be noted in the Remarks section. Equipment must be inspected by maintenance personnel prior to load test.

NOTES: 1. Qualified inspector must verify the inspection is completed.

| No. | CRANE ITEM                       | DEFECT | OK | NA | NO. | CRANE ITEM                     | DEFECT | OK | NA |
|-----|----------------------------------|--------|----|----|-----|--------------------------------|--------|----|----|
| 1   | Wire Rope                        |        |    |    | 13  | Hoist Clutch Lining            |        |    |    |
| 2   | Cracked or Worn Sheave or Drum   |        |    |    | 14  | Hoist Drum Brake Bands         |        |    |    |
| 3   | Limit Switch (Anti-Two Blocking) |        |    |    | 15  | Open Gears                     |        |    |    |
| 4   | Boom                             |        |    |    | 16  | Boom Jib (as applicable)       |        |    |    |
| 5   | Master Clutch                    |        |    |    | NO  | Carrier Items                  | DEFECT | OK | NA |
| 6   | Steering Clutches                |        |    |    | 1   | Steering Gears and Connections |        |    |    |
| 7   | Hydraulic Pump                   |        |    |    | 2   | Brakes (service and hand)      |        |    |    |
| 8   | Hydraulic Controls               |        |    |    | 3   | Tires and Wheels               |        |    |    |
| 9   | Hydraulic Hoses                  |        |    |    | 4   | Lubrication                    |        |    |    |
| 10  | Mechanical Controls              |        |    |    |     | OPERATING TEST                 |        |    |    |
| 11  | Drive Chains                     |        |    |    |     | OVERALL CONDITION              |        |    |    |
| 12  | Swing Clutches                   |        |    |    |     |                                |        |    |    |

**REMARKS** (Unusual conditions – noises, structural cracks, misalignment, etc.)

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**SAFETY ITEMS:** (Fire extinguisher, signs, guards, etc.)

## **MOBILE CRANE LOAD TEST AND FOLLOW-UP CHECKS**

**NOTES:** 1. Qualified inspector must verify all steps below.

- \_\_\_\_\_ 1. Set crane up for load test and inspection.
- \_\_\_\_\_ 2. Perform operations test without load to verify proper function of the following:
  - Load lifting and lowering mechanisms
  - Boom lifting and lowering mechanism
  - Boom extension and retraction mechanisms
  - Swinging mechanism
  - Travel mechanism
  - Safety devices.
- \_\_\_\_\_ 3. Test loads must not exceed 110% of rated capacity. Refer to load chart for load test capacity at maximum and minimum working radius. Check boom angle indicators for accuracy.
- \_\_\_\_\_ 4. Rig test weights to hook using appropriate slings.
- \_\_\_\_\_ 5. Hoist the test load a sufficient distance to ensure that the load is supported by the crane and held by the hoist brakes. Hold the load for 10 min or the time required to check all primary load-bearing parts while under load without slippage, damage, or permanent deformation.
- \_\_\_\_\_ 6. At least once during the lifting portion of the hoisting cycle and once during the lowering cycle, power to the hoisting equipment must be completely turned off. There must be no slippage of the load or overheating of the brakes.
- \_\_\_\_\_ 7. Lower the load to approximately 2 in. off the ground to check for swing-roller operation and outrigger stability. Slowly swing test load between outriggers locations.
- \_\_\_\_\_ 8. Move the load back to the original position and slowly lower to ground.
- \_\_\_\_\_ 9. At the completion of the load test, inspect the following:

## MOBILE CRANE LOAD TEST AND FOLLOW-UP CHECKS

DEFECTIVE/OK/NA

- \_\_\_\_\_ a. Rope diameter: (Previous) \_\_\_\_\_ (Present) \_\_\_\_\_
- \_\_\_\_\_ b. Wear
- \_\_\_\_\_ c. Kinks
- \_\_\_\_\_ d. Broken wires
- \_\_\_\_\_ e. Other signs of deterioration

Visually inspect the rope drum for:

- \_\_\_\_\_ a. Wear
- \_\_\_\_\_ b. Deformation
- \_\_\_\_\_ c. Deterioration
- \_\_\_\_\_ d. Have qualified inspector perform nondestructive tests on hook by visual examination, liquid penetrant examination, or magnetic-particle examination.  
Acceptance: No cracks, linear indications, laps, or seams.

Hooks with any distortion causing an increase in the throat opening of 5% not to exceed  $\frac{1}{4}$ " of original throat opening, hooks with any visible bend or twist from the original plane of the hook, and hooks having any wear exceeding 10% of original must be replaced.  
Lubricate hook bearing and latch pin, as applicable.

Establish three marks; A, B, and C, with a center punch. For ease in measuring, set distances on an even number of inches.

BEFORE LOAD TEST

Length AB \_\_\_\_\_ in

Length BC \_\_\_\_\_ in

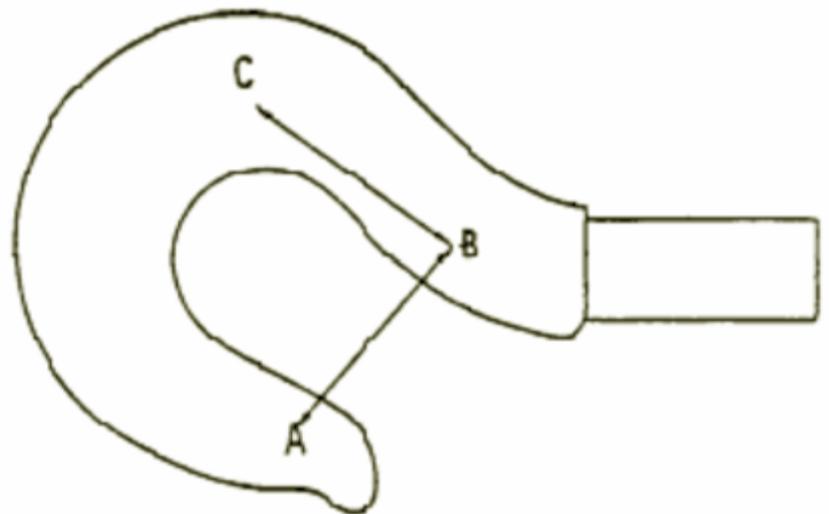
After Load Test

Length AB \_\_\_\_\_ in

Length BC \_\_\_\_\_ in

Check for:

1. Wear and deformation
2. Cracks and twisting
3. Signs of opening between Point A and Point B



## **MOBILE CRANE LOAD TEST LOAD AND FOLLOW-UP CHECKS**

This information should be retained with the equipment.  
Record the following:

**BLOCK WEIGHT** \_\_\_\_\_ **lb.**

**TEST WEIGHT** \_\_\_\_\_ **lb.**

**RADIUS/CENTER PIN TO LOAD** \_\_\_\_\_ **ft.**

**% OF TEST WEIGHT COMPAIRED TO CHART** \_\_\_\_\_ **%**

**PARTS LINE** \_\_\_\_\_ **quantity**

**BOOM LENGTH** \_\_\_\_\_ **ft.**

**Load Test Inspection Date** \_\_\_\_\_

**Qualified Inspector** \_\_\_\_\_

**Operated By** \_\_\_\_\_

**Remarks:**

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