



2021 GROVE GMK-4090 / 4090-4064

Prepared for:  
**LOCKE CRANE SERVICES**



P.O. Box 246  
Chester, NH 03036

on

4/30/2023

# Overview

## Breakdown by Form

| Form Type                                |  High |  Med |  Low | # Forms  |
|--|--|---|---|----------|
| Inspection                               | 0  | 0   | 0   | 1        |
| Local Acknowledgment Of Unit Examination | 0  | 0   | 0   | 1        |
| <b>Overall:</b>                          | <b>0</b>   | <b>0</b>  | <b>0</b>  | <b>2</b> |

## Breakdown by Location

| Location        |  High |  Med |  Low | # Forms  |
|-----------------|--|---|---|----------|
| Tewksbury, MA   | 0  | 0   | 0   | 2        |
| <b>Overall:</b> | <b>0</b>   | <b>0</b>  | <b>0</b>  | <b>2</b> |

## Breakdown by Asset

| Asset Type             |  High |  Med |  Low | # Assets |
|------------------------|--|---|---|----------|
| Telescoping Boom Crane | 0  | 0   | 0   | 1        |
| <b>Overall:</b>        | <b>0</b>   | <b>0</b>  | <b>0</b>  | <b>1</b> |

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**Inspection**  
**LOCKE CRANE SERVICES**  
P.O. Box 246  
Chester, NH 03036

FolderID: A16265  
FormID: 16661592



**Telescoping Boom Crane**  
**Completed by: Steven Marquis on 04/30/2023**

**Location:** Tewksbury, MA

**Serial #:** 4090-4064

**TagID:** 27

**Status:** In Service

**Description:** 2021 GROVE GMK-4090 / 4090-4064

**Manufacturer:** Grove

**Model:** GMK-4090

**Capacity:** see OEM capacity chart

**Length/Lift:** 36 - 167 ft

**Hook Type:** Load Block & Hook

**Hours and Miles**

- 1. Hours **01,166 LMI hours**
- 2. Miles

**Historical Records**

- 3. Monthly Inspection **(SAT) Satisfactory**
- 4. Record of Maintenance **(SAT) Satisfactory**
- 5. Documentation of Annual / Comprehensive Inspection **(SAT) Satisfactory**
- 6. Equipment Modification(s) or additions **(SAT) Satisfactory**
- 7. Record of Load Test **(SAT) Satisfactory**

**General**

- 8. External Lights **(SAT) Satisfactory**
- 9. Housekeeping **(SAT) Satisfactory**
- 10. Safety and Warning Labels **(SAT) Satisfactory**
- 11. Hand Signal Chart **(SAT) Satisfactory**

**Driver's Cab and Station**

- 12. Service Brake **(SAT) Satisfactory**
- 13. Emergency Brake **(SAT) Satisfactory**
- 14. Parking Brake **(SAT) Satisfactory**
- 15. External Lights (Headlights, Taillights, Brake Lights) **(SAT) Satisfactory**
- 16. Audible Warning Device **(SAT) Satisfactory**
- 17. Audible Reverse Signal Alarm **(SAT) Satisfactory**
- 18. Windows / Mirrors **(SAT) Satisfactory**
- 19. Windshield Wipers **(SAT) Satisfactory**

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|  |                     |
|--|---------------------|
| ● 20. Windshield Defroster             | (SAT) Satisfactory  |
| ● 21. Seatbelts                        | (SAT) Satisfactory  |
| ● 22. Tires                            | (SAT) Satisfactory  |
| ● 23. Seat                             | (SAT) Satisfactory  |
| ● 24. Steering                         | (SAT) Satisfactory  |
| ● 25. Housekeeping                     | (SAT) Satisfactory  |
| ● 26. Fire Extinguisher                | (SAT) Satisfactory  |
| <b>Lower Carrier Power Plant</b>       |                     |
| ● 27. Engine Performance               | (SAT) Satisfactory  |
| ● 28. Exhaust System                   | (SAT) Satisfactory  |
| ● 29. Belts                            | (SAT) Satisfactory  |
| ● 30. Rotating and Reciprocating Parts | (SAT) Satisfactory  |
| <b>Carrier</b>                         |                     |
| ● 31. Transmission                     | (SAT) Satisfactory  |
| ● 32. Drive Line                       | (SAT) Satisfactory  |
| ● 33. Tires                            | (SAT) Satisfactory  |
| ● 34. Tire Air Pressure                | (SAT) Satisfactory  |
| ● 35. Main Frame Members               | (SAT) Satisfactory  |
| ● 36. Hydraulic Hoses, Fittings, Tubes | (SAT) Satisfactory  |
| ● 37. Hydraulic Fluid Level            | (SAT) Satisfactory  |
| ● 38. Hoses / Tubing / Fittings .      | (SAT) Satisfactory  |
| ● 39. Slip Resistant Walking surface   | (SAT) Satisfactory  |
| ● 40. Axle Lockout                     | (SAT) Satisfactory  |
| ● 41. Audible Reverse Signal Alarm     | (SAT) Satisfactory  |
| <b>Outriggers</b>                      |                     |
| ● 42. Boxes & Beams                    | (SAT) Satisfactory  |
| ● 43. Hydraulic Cylinders              | (SAT) Satisfactory  |
| ● 44. Pad / Float                      | (SAT) Satisfactory  |
| ● 45. Hoses / Tubing / Fittings        | (SAT) Satisfactory  |
| ● 46. Holding Valves                   | (SAT) Satisfactory  |
| ● 47. Caution / Warning Signs          | (SAT) Satisfactory  |
| <b>Operator's Station</b>              |                     |
| ● 48. Windows                          | (SAT) Satisfactory  |
| ● 49. Windshield Wipers                | (SAT) Satisfactory  |
| ● 50. Cab Door Restraint               | (SAT) Satisfactory  |
| ● 51. Cab Access                       | (SAT) Satisfactory  |
| ● 52. Steps / Ladders / Handrails      | (SAT) Satisfactory  |
| ● 53. Anti-Skid Stepping Surfaces      | (SAT) Satisfactory  |
| ● 54. Load Chart                       | (SAT) Satisfactory  |
| ● 55. Fire Extinguisher                | (SAT) Satisfactory  |
| ● 56. Operator's Manual                | (SAT) Satisfactory  |
| ● 57. Seat                             | (SAT) Satisfactory  |
| ● 58. Seatbelts                        | (NA) Not Applicable |
| ● 59. Electrocutation Warning Sign(s)  | (SAT) Satisfactory  |
| ● 60. Level                            | (SAT) Satisfactory  |
| ● 61. Horn                             | (SAT) Satisfactory  |
| ● 62. Load Indicator                   | (SAT) Satisfactory  |


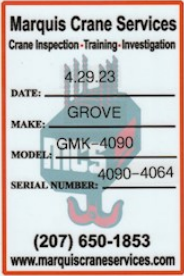
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|   |                     |
|---|---------------------|
| ● 63. Controls Identified                                 | (SAT) Satisfactory  |
| ● 64. Control Mechanisms                                  | (SAT) Satisfactory  |
| ● 65. Power Plant Controls                                | (SAT) Satisfactory  |
| ● 66. Brake and Clutch                                    | (NA) Not Applicable |
| ● 67. Travel Brakes                                       | (NA) Not Applicable |
| ● 68. Travel Controls                                     | (NA) Not Applicable |
| ● 69. Travel Mechanism                                    | (NA) Not Applicable |
| ● 70. Travel Locks  | (NA) Not Applicable |
| <b>Load Chart</b>   |                     |
| ● 71. Ground Level, Remotely Controlled                   | (NA) Not Applicable |
| ● 72. Per Configuration                                   | (SAT) Satisfactory  |
| ● 73. Visible from Fixed Operator's Station               | (SAT) Satisfactory  |
| ● 74. Durable / Legible/ Secured                          | (SAT) Satisfactory  |
| <b>Safety Devices / Operational Aids</b>                  |                     |
| ● 75. Boom Angle Indicator                                | (SAT) Satisfactory  |
| ● 76. Boom Length Indicator                               | (SAT) Satisfactory  |
| ● 77. Main Drum Rotation Indicator                        | (SAT) Satisfactory  |
| ● 78. Auxiliary Drum Rotation Indicator                   | (SAT) Satisfactory  |
| ● 79. Load Moment Indicator                               | (SAT) Satisfactory  |
| ● 80. Load Weight Indicator                               | (SAT) Satisfactory  |
| ● 81. Radius Indicator                                    | (SAT) Satisfactory  |
| ● 82. Level Indicator                                     | (SAT) Satisfactory  |
| ● 83. Barge List & Trim Indicator                         | (NA) Not Applicable |
| ● 84. If Barge Mounted, Is The Crane Secured To The Barge | (NA) Not Applicable |
| ● 85. Two-Block System                                    | (SAT) Satisfactory  |
| ● 86. Overload Prevention Device                          | (SAT) Satisfactory  |
| <b>Rotating Upper Structure</b>                           |                     |
| ● 91. Turntable / Bearing                                 | (SAT) Satisfactory  |
| ● 92. Turntable / Rollers                                 | (NA) Not Applicable |
| ● 93. Counterweight Frame                                 | (SAT) Satisfactory  |
| ● 94. Ring and Pinion Gear                                | (SAT) Satisfactory  |
| ● 95. Hydraulic and Pneumatic Pumps                       | (SAT) Satisfactory  |
| ● 96. Hydraulic Tubes, Fitting, and Hoses                 | (SAT) Satisfactory  |
| ● 97. Hydraulic Pressure                                  | (SAT) Satisfactory  |
| ● 98. Electrical Wiring                                   | (SAT) Satisfactory  |
| ● 99. Main Hoist - Brakes and Clutch System               | (SAT) Satisfactory  |
| ● 100. Main Hoist - Wire Rope Reeving                     | (SAT) Satisfactory  |
| ● 101. Main Hoist - Meets 2 rope wrap minimum             | (SAT) Satisfactory  |
| ● 102. Auxiliary Hoist - Brakes and Clutch System         | (NA) Not Applicable |
| ● 103. Auxiliary Hoist - Wire Rope Reeving                | (NA) Not Applicable |
| ● 104. Auxiliary Hoist - Meets 2 rope wrap minimum        | (NA) Not Applicable |
| ● 105. Swing System / Assembly                            | (SAT) Satisfactory  |
| ● 106. Counterweight Mounting                             | (SAT) Satisfactory  |
| ● 107. Counterweight Posted Warnings                      | (SAT) Satisfactory  |
| ● 108. Electrocutation Posted Warnings                    | (SAT) Satisfactory  |
| <b>Main Boom</b>  |                     |
| ● 114. Lift Cylinder(s)                                   | (SAT) Satisfactory  |

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|  |                             |
|--|-----------------------------|
| ● 115. Telescoping Boom Cylinder(s)  | (SAT) Satisfactory          |
| ● 116. Hydraulic Hoses, Tubes, and Fittings  | (SAT) Satisfactory          |
| ● 117. Holding Device  | (SAT) Satisfactory          |
| ● 118. Boom Sections Alignment   | (SAT) Satisfactory          |
| ● 119. Wear Pads   | (SAT) Satisfactory          |
| ● 120. Sheaves   | (SAT) Satisfactory          |
| ● 121. Hoist Line Dead End   | (SAT) Satisfactory          |
| ● 122. Boom Hinge Pin  | (SAT) Satisfactory          |
| ● 123. Boom Head Section   | (SAT) Satisfactory          |
| ● 124. Auxiliary Boom Head   | (NA) Not Applicable         |
| ● 125. Structure   | (SAT) Satisfactory          |
| <b>Main Drum Wire Rope</b>   |                             |
| ● 134. Rope Damage   | (SAT) Satisfactory          |
| ● 135. Diameter and wear   |                             |
| Size   | Actual diameter measurement |
| <b>16 mm</b>   | <b>16.43 mm</b>             |
| ● 136. Lubrication   | (SAT) Satisfactory          |
| ● 137. End Connectors  | (SAT) Satisfactory          |
| <b>Luffing Boom</b>  |                             |
| ● 138. Luffing Jib Section Identification  | (SAT) Satisfactory          |
| ● 139. Luffing Jib Section Sequence  | (SAT) Satisfactory          |
| ● 140. Luffing Jib Tip Section   | (SAT) Satisfactory          |
| ● 141. Luffing jib Warning Decals  | (SAT) Satisfactory          |
| ● 142. Luffing Jib Point Sheaves   | (SAT) Satisfactory          |
| ● 143. Luffing Hoist Line Dead End   | (SAT) Satisfactory          |
| ● 144. Wire Rope Retainers   | (SAT) Satisfactory          |
| ● 145. Luffing Jib Foot Keepers and Pins   | (SAT) Satisfactory          |
| ● 146. Lattice Members   | (SAT) Satisfactory          |
| ● 147. Cord Members  | (SAT) Satisfactory          |
| ● 148. End Connections and Pins  | (SAT) Satisfactory          |
| ● 149. Luffing Jib Angle Indicator   | (SAT) Satisfactory          |
| ● 150. Guard Rails   | (NA) Not Applicable         |
| ● 151. Luffing Jib Stops   | (SAT) Satisfactory          |
| 🗨 <i>hydraulic cylinder</i>  |                             |
| ● 152. Walking Surfaces  | (NA) Not Applicable         |
| ● 153. Luffing Jib Hoist Reeving   | (NA) Not Applicable         |
| <b>Load Block &amp; Hook</b>   |                             |
| ● 159. Capacity Marking  | (SAT) Satisfactory          |
|  |                             |
| ● 160. Weight Marking  | (SAT) Satisfactory          |

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|  |                     |
|--|---------------------|
| ● 161. Sheave(s)   | (SAT) Satisfactory  |
| ● 162. Safety Latch(es)  | (SAT) Satisfactory  |
| ● 163. 0° Hook Bend or Twist   | (SAT) Satisfactory  |
| ● 164. 5% Hook Opening or 1/4" Max   | (SAT) Satisfactory  |
| ● 165. 10% Hook Wear Max   | (SAT) Satisfactory  |
| ● 166. Bearing   | (SAT) Satisfactory  |
| ● 167. Wedge Socket / End Fitting  | (SAT) Satisfactory  |
| ● 168. Reeving   | (SAT) Satisfactory  |
| <b>No-Load Operational Test</b>  |                     |
| ● 177. No-Load Operational Test  | (SAT) Satisfactory  |
| <b>Verification and Completion</b>   |                     |
| ● 178. Inspector Name and Signature  | Steve Marquis       |
|   |                     |
| ● 179. Date of Inspection  | 04/29/2023          |
| ● 180. Customer Name and Signature   | LOCKE CRANE SERVICE |
| ● 181. Certificate Issued  | (Y) Yes             |
|  |                     |

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## Local Acknowledgment Of Unit Examination

### LOCKE CRANE SERVICES

P.O. Box 246  
Chester, NH 03036

FolderID: AI6265  
FormID: 16661593



#### Telescoping Boom Crane

Completed by: **Steven Marquis on 04/30/2023**

Location: Tewksbury, MA

Serial #: 4090-4064

TagID: 27

Status: In Service

Description: 2021 GROVE GMK-4090 / 4090-4064

Manufacturer: Grove

Model: GMK-4090

Capacity: see OEM capacity chart

Length/Lift: 36 - 167 ft

Hook Type: Load Block & Hook

### Local Acknowledgment Of Unit Examination

|                                      |  |
|--------------------------------------|--|
| ● 1. OWNERS IDENTIFICATION           | 27   |
| ● 2. OWNER/EMPLOYER                  | LOCKE CRANE SERVICE                                  |
| ● 3. OWNERS ADDRESS                  | P.O. Box 246 - Chester, NH<br>03036                  |
| ● 4. TYPE OF DEVICE                  | CRANE  |
| ● 5. CRANE LOCATION/ADDRESS          | 860 East St. - Tewksbury, MA                         |
| ● 6. DOES UNIT CHANGE WORKSITES?     | (Y) YES  |
| ● 7. HOUR METER                      | 01,166   |
| ● <input type="checkbox"/> LMI hours |  |
| ● 8. MANUFACTURER                    | GROVE  |
| ● 9. MODEL                           | GMK-4090   |
| ● 10. SERIAL NUMBER                  | 4090-4064  |
| ● 11. DESCRIPTION OF DEVICE          | hydraulic boom - all terrain                         |
| ● 12. MAXIMUM CAPACITY               | see OEM load capacity chart<br>for configuration     |
| ● 13. SERVICE STATUS                 | HOOK WORK  |
| ● 14. BOOM LENGTH & TYPE             | 36 - 167 ft / telescopic full<br>power - pin & latch |
| ● 15. LUFFING JIB LENGTH & TYPE      | 28 or 49 ft / SAW bi-fold lattice                    |
| ● 16. FIXED JIB LENGTH & TYPE        |  |
| ● 17. TOWER HEIGHT & TYPE            |  |

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|   |                |                       |
|---|----------------|-----------------------|
| ● 18. PROOF LOAD TEST APPLIED 1.1   |                |                       |
| BOOM LENGTH   | BOOM ANGLE     | RADIUS                |
| 86.6 ft   | 29.8           | 70 ft                 |
|   |                |                       |
| ● 19. PROOF LOAD TEST APPLIED 1.2   |                |                       |
| RATED LOAD  | PROOF LOAD     | % OF RATED LOAD       |
| 6,500 lbs   | 6,500 lbs      | 100                   |
| ● 20. PROOF LOAD TEST APPLIED 1.3   |                |                       |
| HOIST USED  | BOOM DIRECTION | LOAD CHART NUMBER     |
| main  | over side      | LMI code              |
| ● 21. DESCRIPTION OF PROOF LOAD   |                | crane counter-weights |
| ● 22. BASIS FOR ASSIGNED LOAD RATINGS   |                | OEM designed rating   |
| ● 23. REMARKS AND/OR LIMITATIONS IMPOSED  |                |                       |
| ● 24. I certify that on this date, the above device was examined & tested by the undersigned or authorized representative who in their opinion, said the unit complied with the standards or requirements of OSHA: 1926.1400 and ASME B30.5 |                | 04/29/2023            |
| ● 25. SIGNATURE OF AUTHORIZED PERSON  |                | Steve Marquis         |
|    |                |                       |

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