

 **Lift  
Solutions**<sup>®</sup>

 **Manitowoc**<sup>®</sup>

Lattice-boom crawler cranes







Manitowoc Cranes Lift Solutions Team is a group of sales, engineering, purchasing and operations professionals dedicated to helping customers with unique applications for lattice crawler product. Whether your requirement is for a new or 40-year-old product, the Lift Solutions Team is your answer.

## WHAT IS A LIFT SOLUTION?

### > IS

- New application
- Customization of existing product
- Approval
- Customer supplied attachment
- Special Lift
- Travel
- Wind
- Liftplan/erection procedure
- Custom load chart
- Accident investigation support
- Structural modification

### > IS NOT

- Structural repair (contact Product Support)
- Obsolete part for current or past production model (contact Product Support)
- New serial numbered attachment

Manitowoc knows that not every job is the same and neither is every crane. The Lift Solutions Team will configure your crane to exact requirements, making your Manitowoc crane the perfect tool for your job.

The following pages detail previous Lift Solutions. If you would like to discuss an application you see here, a modification to what is shown, or a new customization, contact your local dealer or the Lift Solutions Team directly at:

(920) 683-6639

or

[steven.blattler@manitowoc.com](mailto:steven.blattler@manitowoc.com)



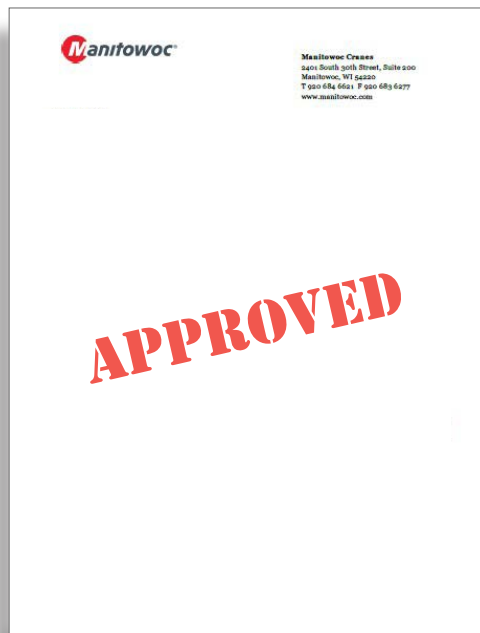
# Contents

Approval letters.....	3	Personnel handling .....	27
Barge tie-downs .....	4	Pile lead adapter .....	28
Boom rollers .....	5	Public Address (PA) system .....	29
Cameras .....	6	Rated Capacity Limiter, external display.....	30
Clamshell package .....	7	Rated Capacity Limiter, light bar .....	31
Collector ring .....	8	Rope guards .....	32
Counterweight .....	9	Set-up remote control .....	33
Custom capacity chart .....	10	Spark arrestor .....	34
Detachable upper boom point.....	11	Swing limiter .....	35
Emergency backup power .....	12	Tagline .....	36
Generator assembly .....	13	Walkways, carbody .....	37
Horn, compressed air .....	14	Walkways, rotating bed .....	38
Hydraulic equipment/attachments .....	15	Wind speed alarm .....	39
Lifting arrangement .....	16		
Lift plan/erection procedure .....	17		
Lights, boom position .....	18		
Lights, boom .....	19		
Lights, rotating bed .....	20		
Lights, service .....	21		
Load block/weight ball .....	22		
Mast lay down .....	23		
Operator's cab, elevated .....	24		
Operator's cab, multi-position .....	25		
Pedals, travel .....	26		

# Approval letters

> Letters approving special lifts, wind conditions, rigging, travel, or customer supplied equipment  
Examples of the different types of letters are:

- Approval for Maximum Operating Wind Speed
- Approval to add/attach customer supplied equipment
- Approval for special lifts
- Deviation Approval Letter – capacity, rigging, reeving, raising, travel, wind conditions, erection or operation procedure, etc.
- Barge List and Trim

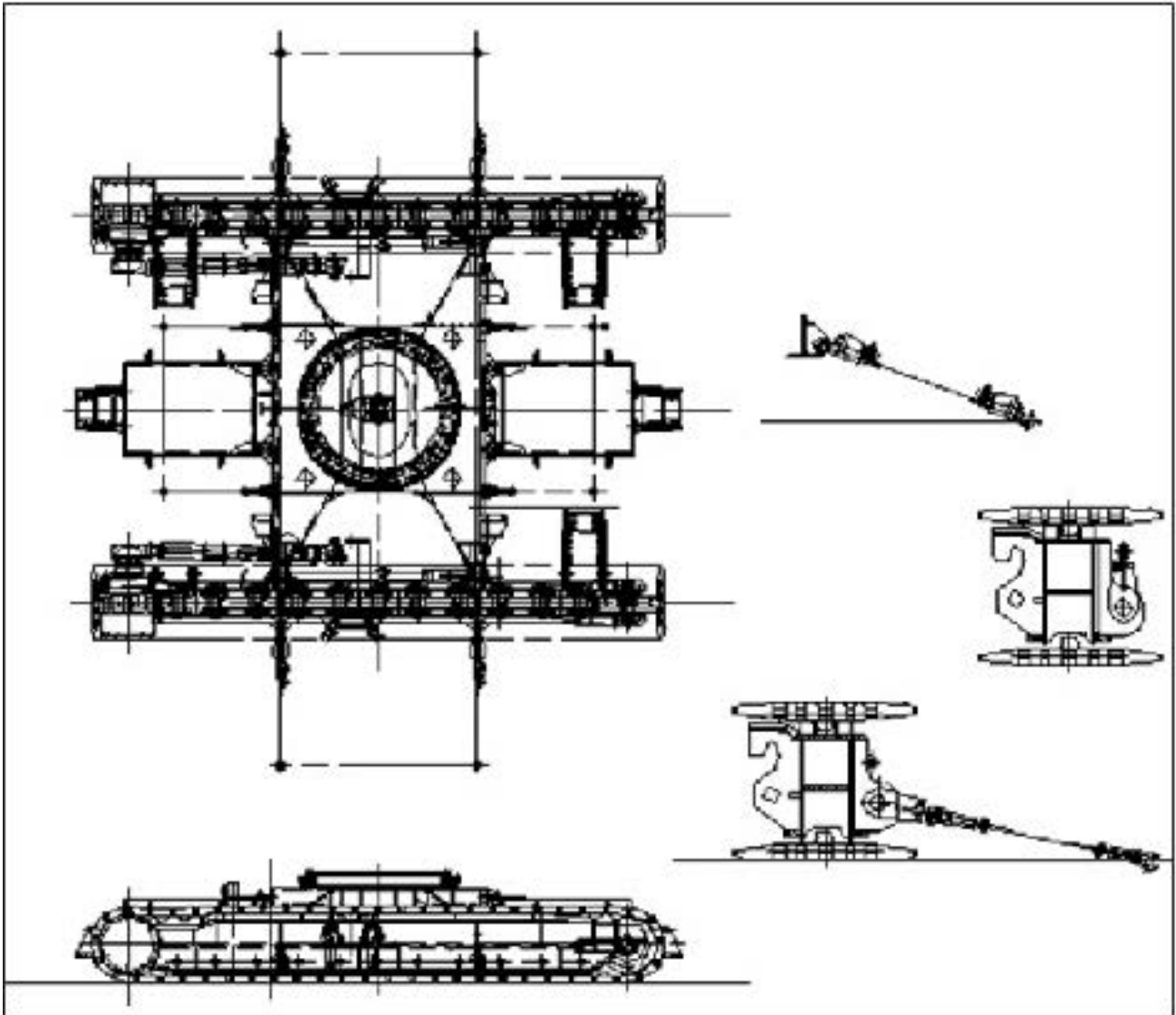


## Notes

For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.

# Barge tie-downs

- > Barge tie-downs consist of locations, components and suggested methods of securing the crane to the barge.

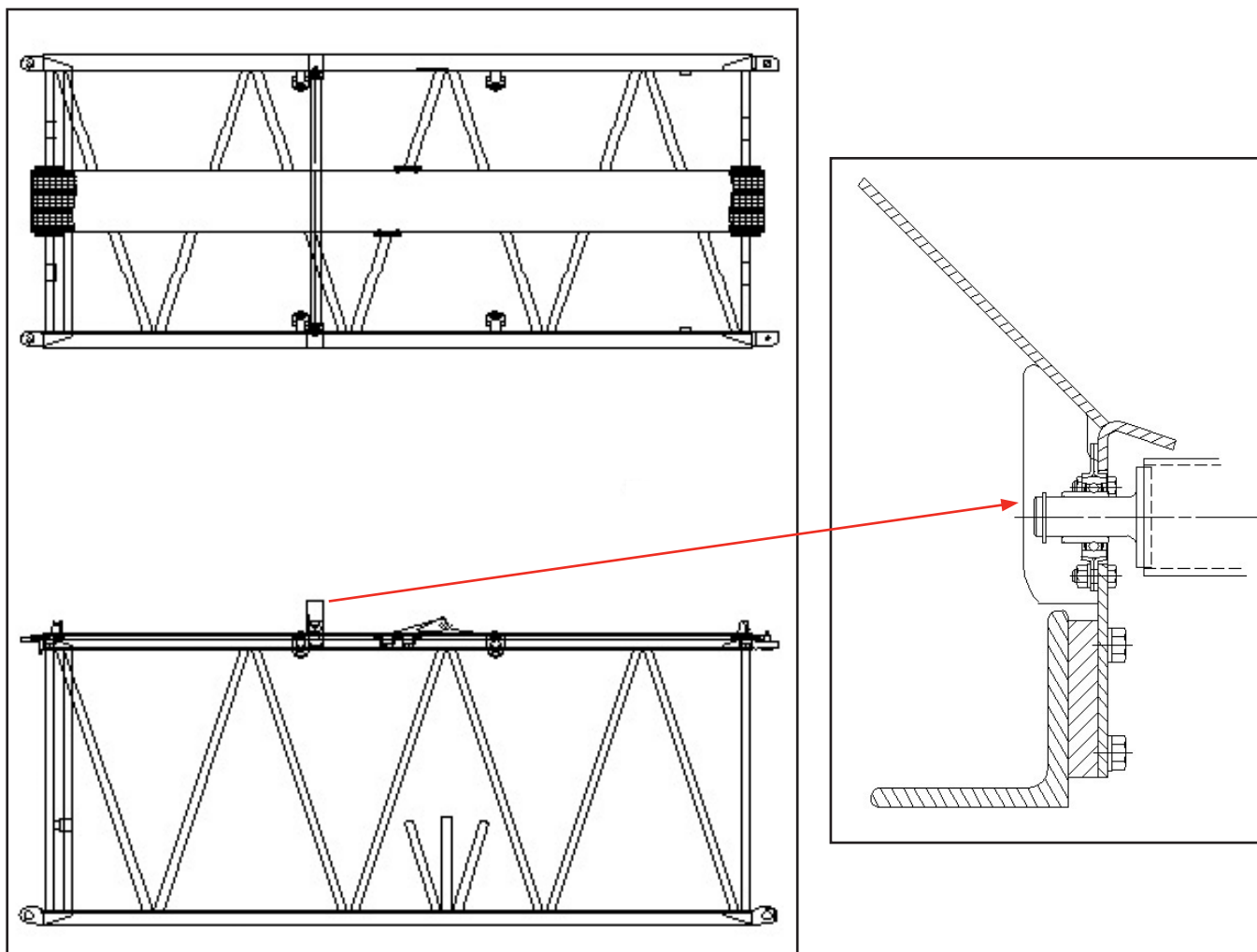


## Notes

A barge mounted crane is positively secured to prevent shifting and is subjected to tipping. When not working, crane carbody is anchored with tie-downs to the barge. For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.

# Boom rollers

- > Boom rollers are designed to keep hoist rope from rubbing lacings on boom. Consist of brackets, bearings, roller and hardware.



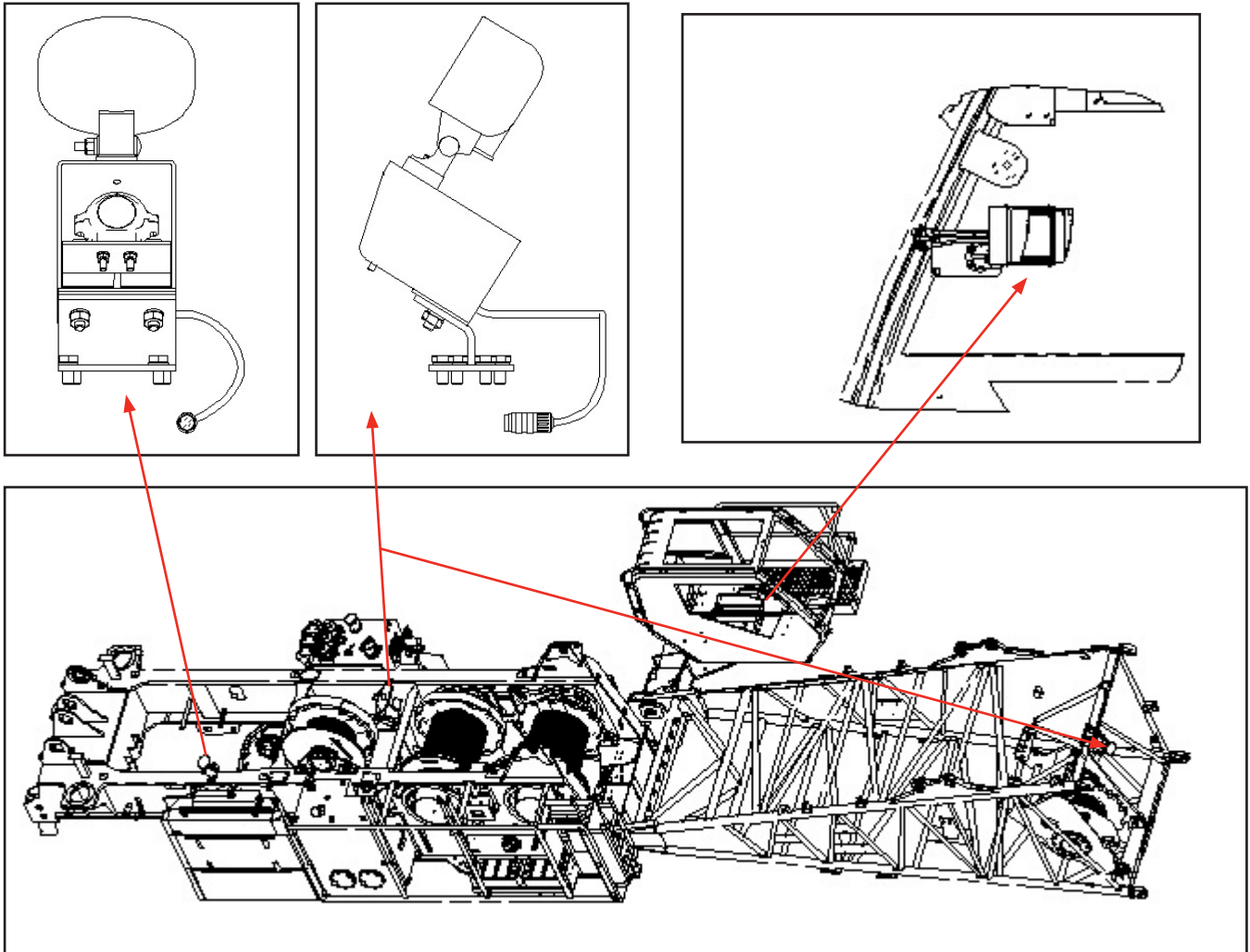
## Notes

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# Cameras

- Cameras allow the operator to view drums, load block from boom point, sides and rear of crane. Camera system consists of multiple camera/light combination units displayed on single or multiple CCTV screens in the operator's cab.

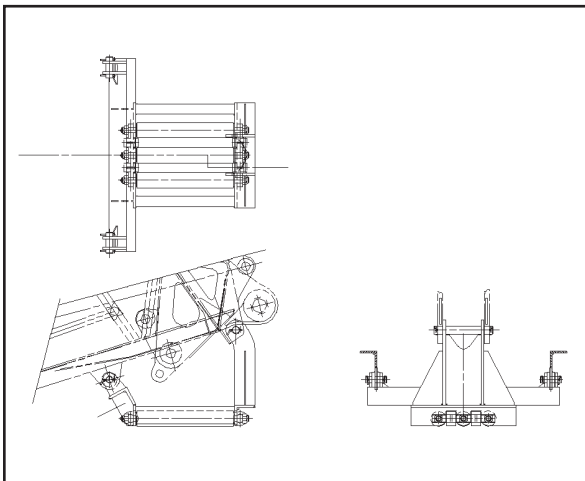
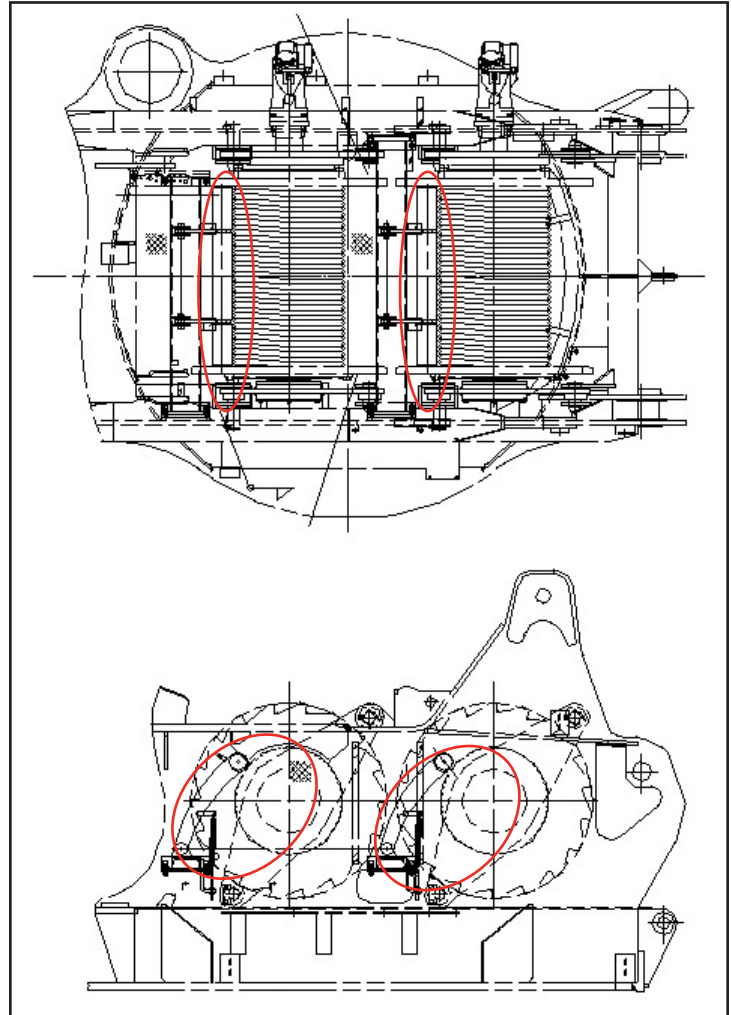
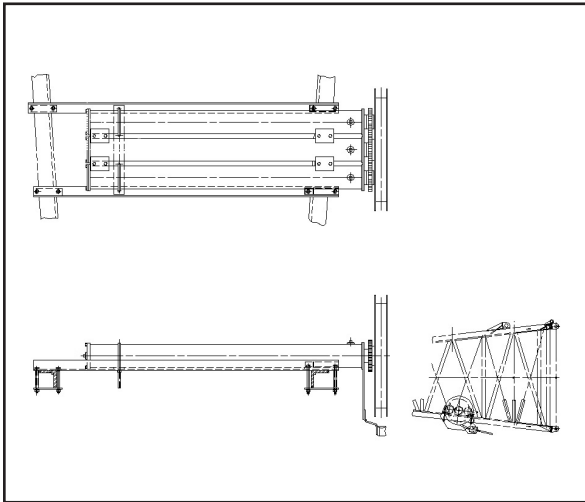


## Notes

For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.

# Clamshell package

- > Clamshell package allows the operator to use a bucket or grab to re-handle product. Consists of pressure rollers for front and rear drum, tagline, wire rope guards, capacity chart and programming.



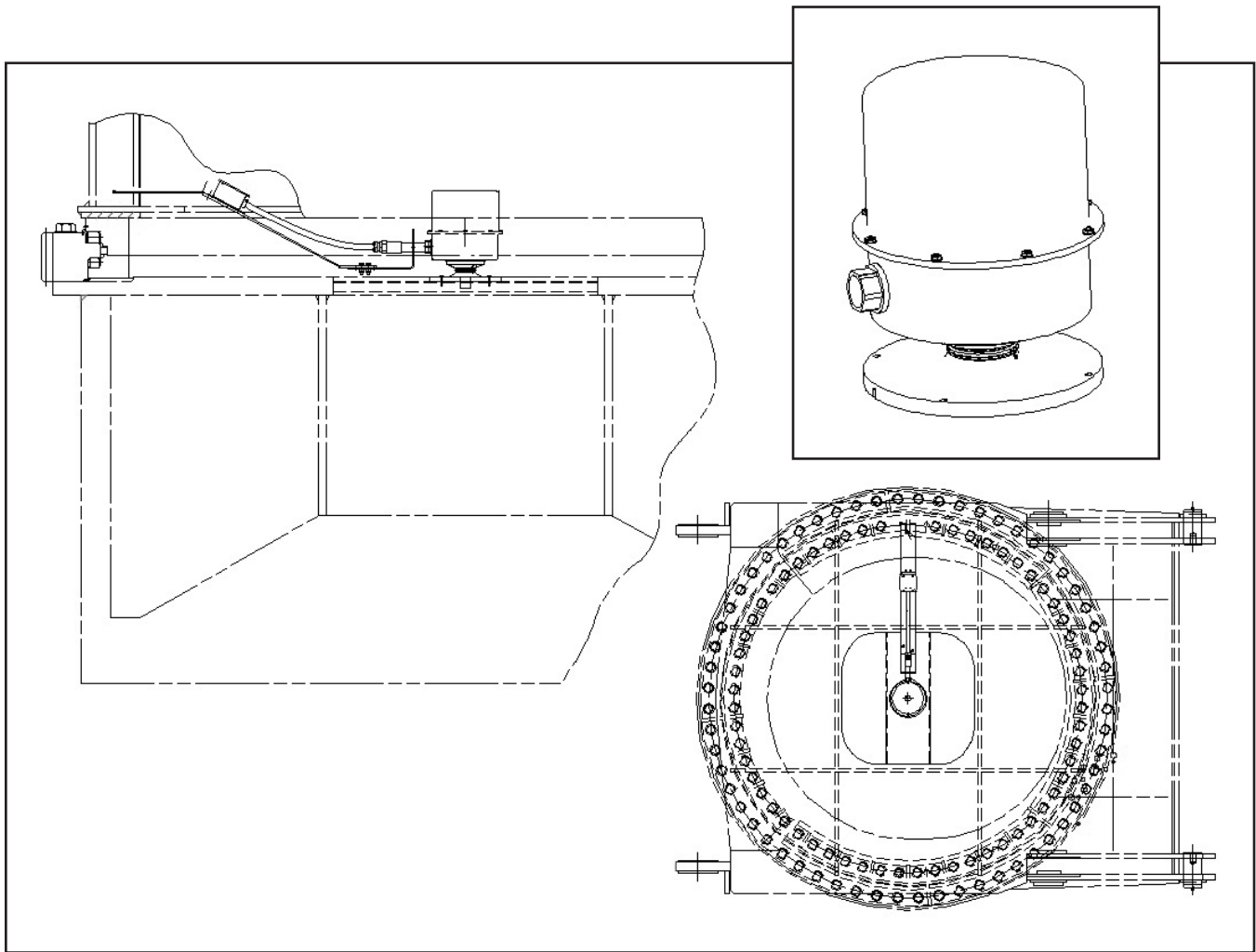
## Notes

Manitowoc recommends machine be equipped with free-fall drums for clamshell operation. For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.



# Collector ring

- Collector ring provides electrical power to components located above the crane turntable bearing. Consists of the collector ring, mounting hardware and junction box.



## Notes

Collector ring specifications determined by requirements of all electrical components. For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.

# Counterweight

> Custom sized counterweight to allow for customer supplied attachments.




## Notes

For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.

# Custom capacity chart


> Custom capacity charts to complement existing capacity charts or when a capacity chart does not exist.



## Clamshell/Grapple Capacities

**Boom No. 17 with Open Throat Top**  
**75,900 lb Counterweight**  
**Crawler Machine on a Barge**  
**0 Degree thru 3 Degree Static Machine List**


4000



**CAPACITIES:** Capacities are for a crawler machine when operating on a barge. Machine must be positively secured to prevent shifting. Capacities for various boom lengths and operating radii are for freely suspended loads and do not exceed 67.5% of a static tipping load. Capacities are based on tipping, structural competence (\*), operating speeds, and other factors.

Weight of bucket is considered part of load. Where no capacity is shown, operation is not intended or approved.

**OPERATING CONDITIONS:** Machine to operate on a firm uniformly supporting surface with gantry up, and machine list not to exceed degrees noted. Refer to boom rigging **No. 42935** and Wire Rope Specification chart **No. 5309**. Crane operator judgment must be used to allow for adverse operating conditions and physical machine depreciation.



**OPERATING RADIUS:** Operating radius is horizontal distance from axis of rotation at barge deck, to center of gravity of freely suspended load. Boom angle is angle above true horizontal of a line drawn through boom hinge pin and upper boom point shaft centerline.

Oper. Rad. Feet	Boom Angle Deg.	Capacity 0 Degree to 1 Degree List Pounds	Capacity 1 Degree to 3 Degree List Pounds
60 Ft. Boom			
28	67.3	28,000 *	27,600 *
30	65.3	28,000 *	27,600 *
32	63.3	28,000 *	27,600 *
34	61.3	28,000 *	27,600 *
36	59.2	28,000 *	27,600 *
38	57.0	28,000 *	27,600 *
40	54.8	28,000 *	27,600 *
45	49.1	28,000 *	27,600 *
50	42.7	28,000 *	27,600 *
55	35.5	28,000 *	27,600 *
60	26.7	28,000 *	27,600 *
Oper. Rad. Feet	Boom Angle Deg.	Capacity 0 Degree to 1 Degree List Pounds	Capacity 1 Degree to 3 Degree List Pounds
70 Ft. Boom			

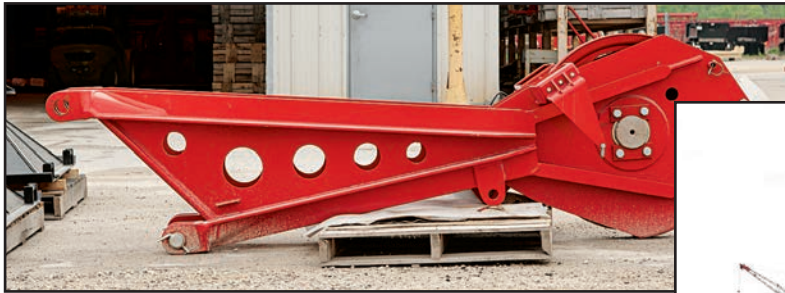
### Notes

For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.



# Detachable upper boom point

- Special detachable upper points for “wind” work, personnel handling, or special lift requirements. Points consist of weldment, sheave(s), RCL and ATB.



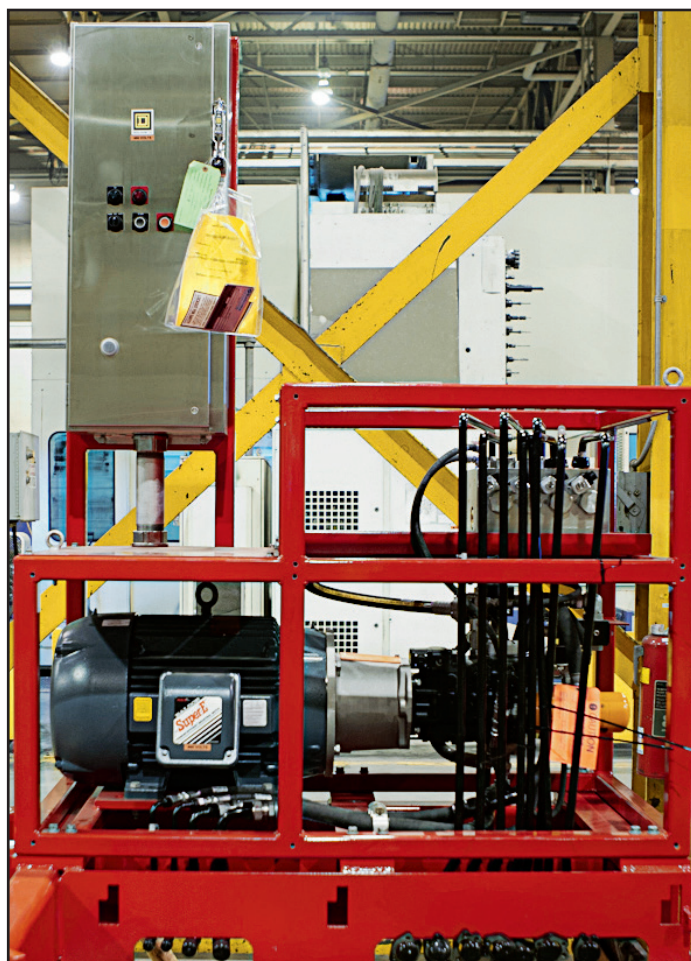
## Notes

For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.



# Emergency backup power

- Emergency backup power allows for operation in the event of main engine failure. Consists of an electric motor, hydraulic pump(s), valves, tubing and controls for independent operation of one of the following: boom hoist, swing and load hoists.

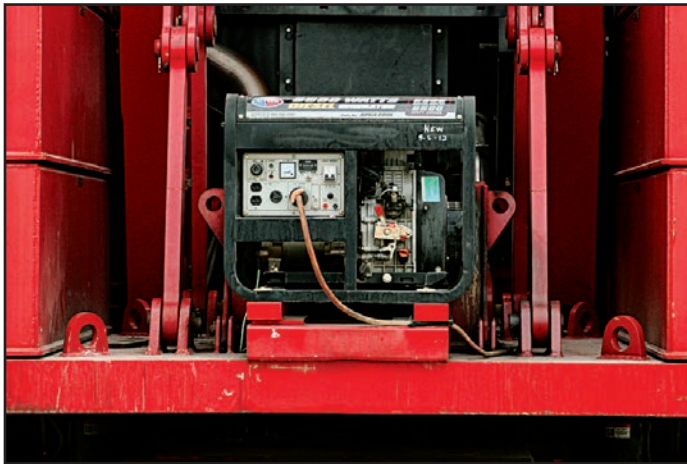


## Notes

Contact Lift Solutions regarding emergency operation. For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.

# Generator assembly

- > Diesel generator set mounted to machine to power any or all of the following: cold weather package, boom lights, rotating bed lights, boom position lights. Consists of a diesel generator, controls, mounting frame and load center.

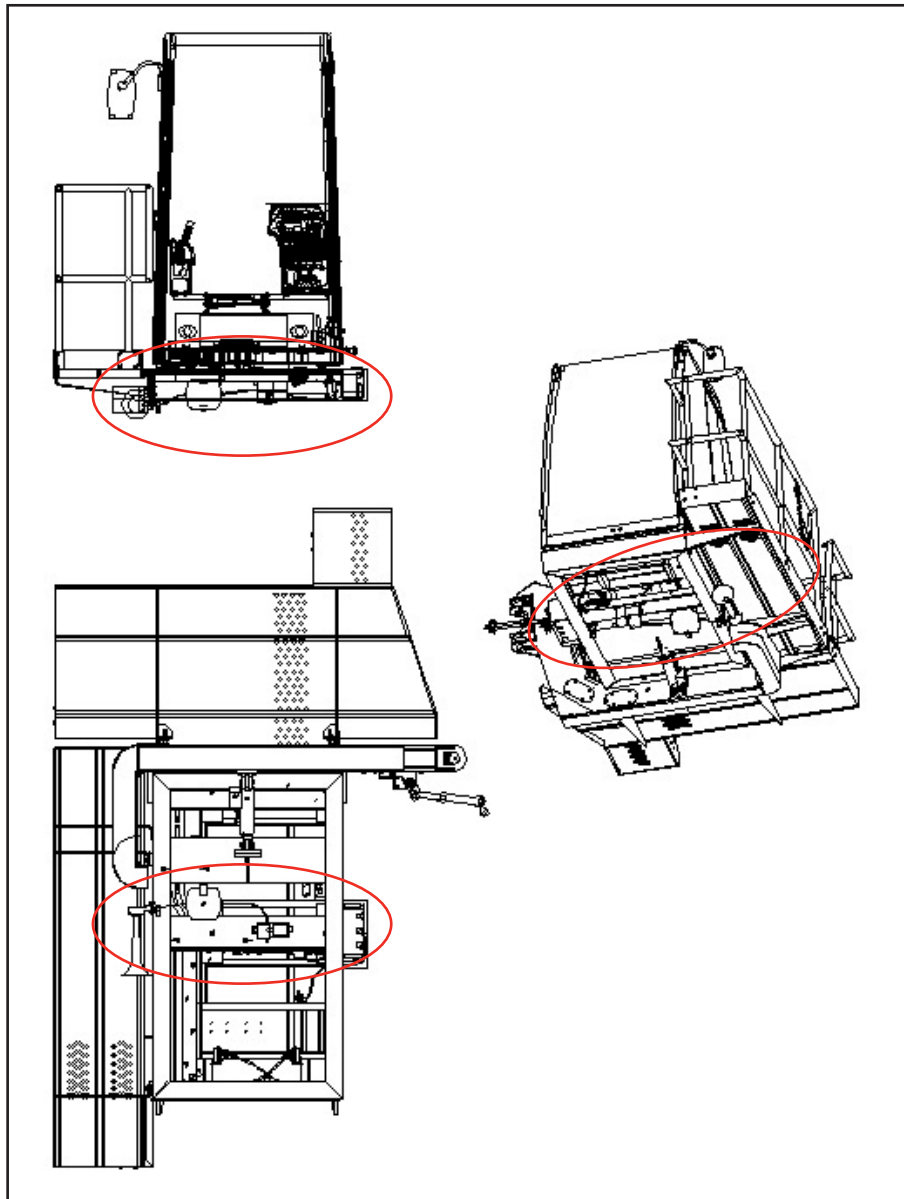


## Notes

Size and voltage depends on customer electrical requirements. For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.

# Horn, compressed air

> Air horn kit consists of compressor, air tank, solenoid valve, horn, tubing and fittings.

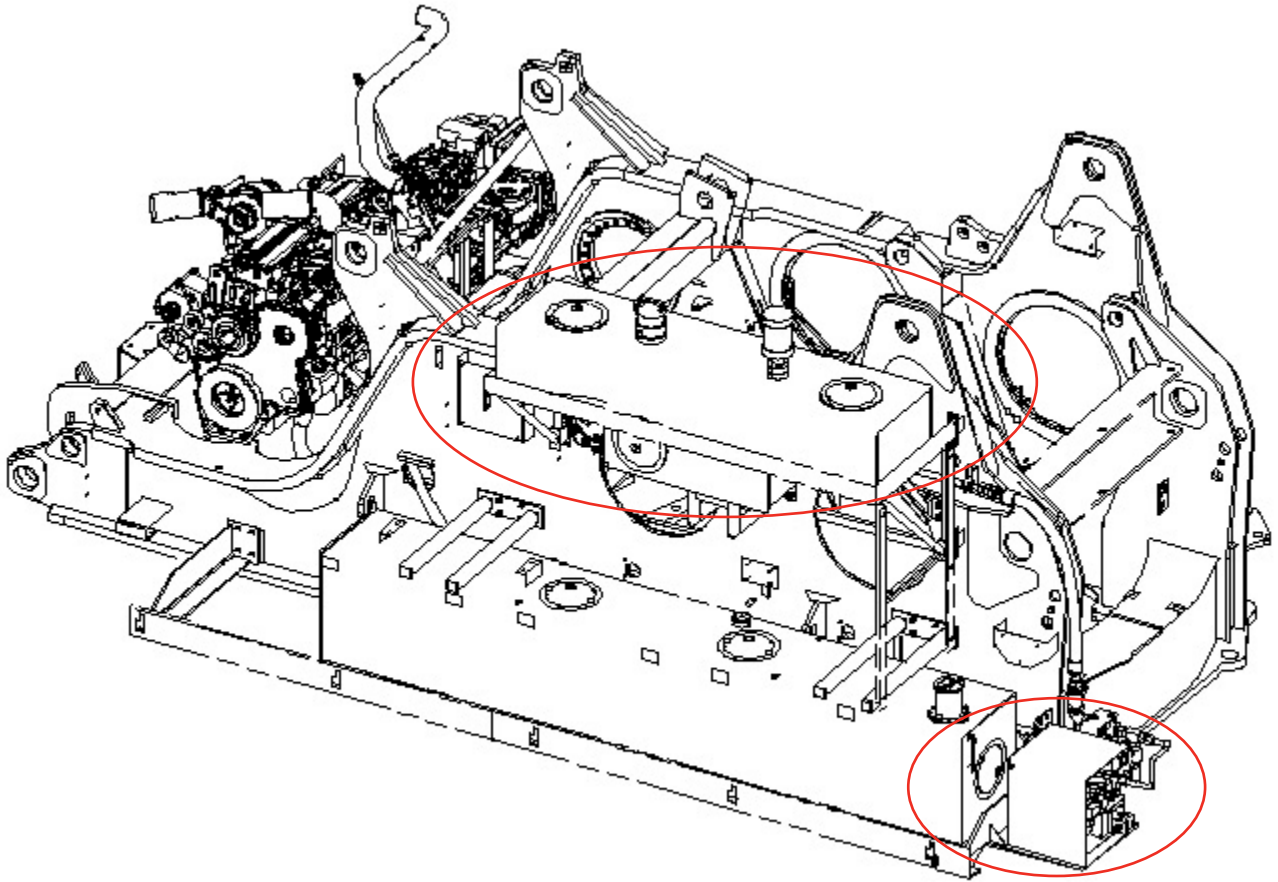


## Notes

For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.

# Hydraulic equipment/attachments

- Machine supplied hydraulic power to run customer supplied equipment. Consists of engineered attachment points, stability calculations, special reeving, hydraulic reservoir, piping, valves and connection points.



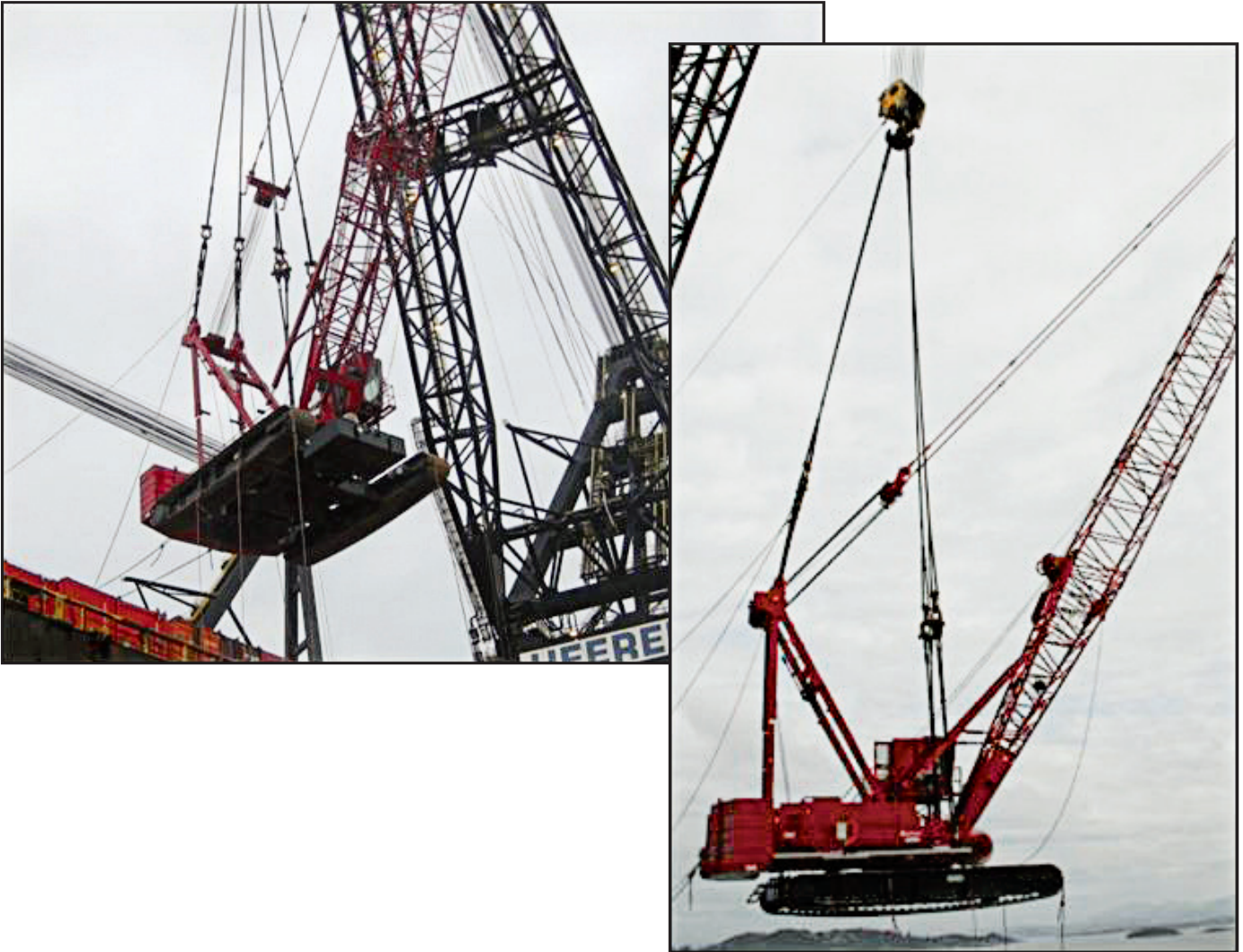
## Notes

Customer to supply Lift Solutions with manufacturer specifications for flow, pressure and/or weights. For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.



# Lifting arrangement

- Lift arrangements allow customer to handle complete machine or components. Consists of engineered lift points, rigging components and sling design.

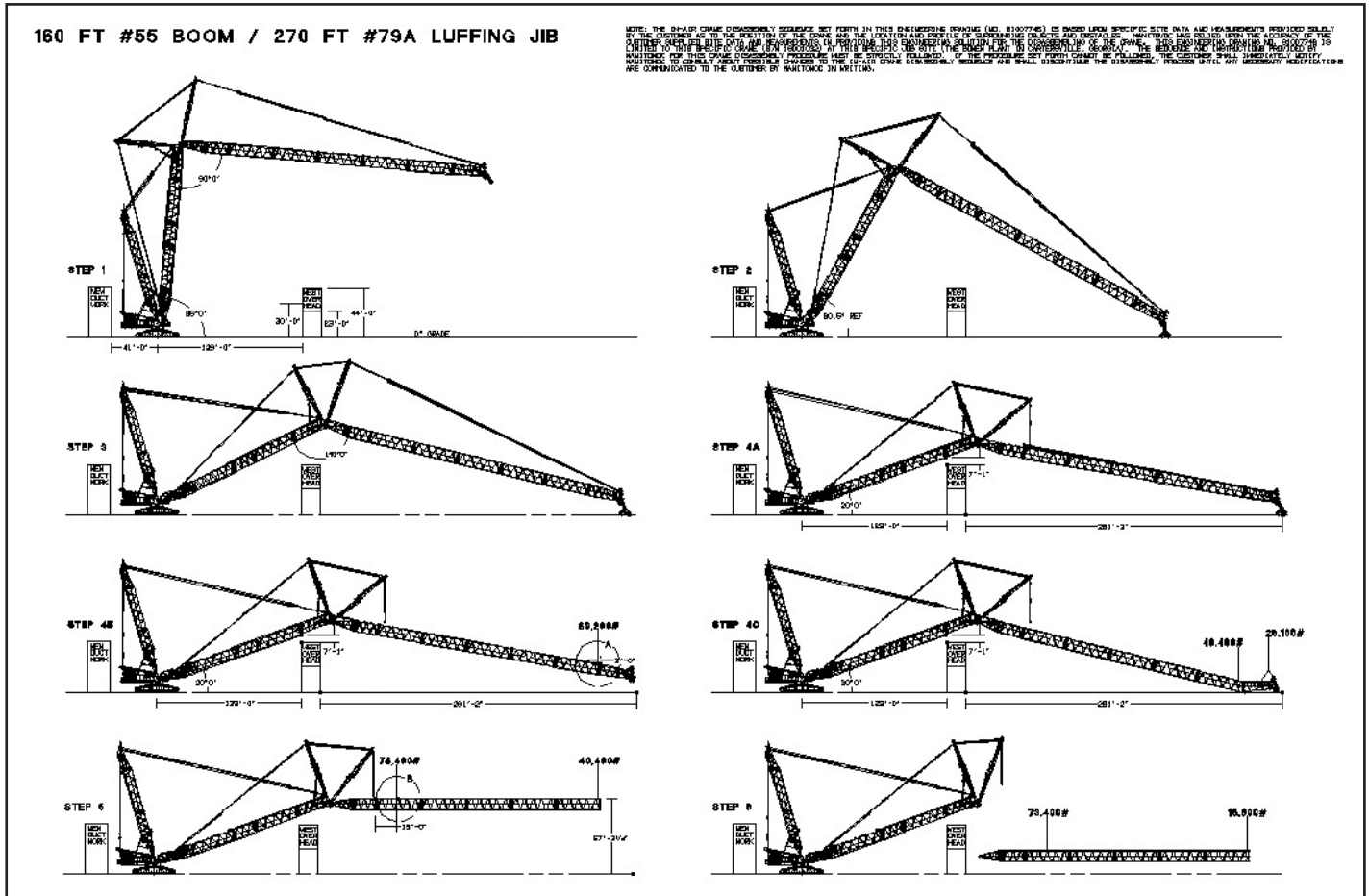


## Notes

For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.

# Lift plan/erection procedure

➤ When the job site has space restrictions, Lift Solutions can lay out your lift or generate assemble/disassemble in the air procedures.

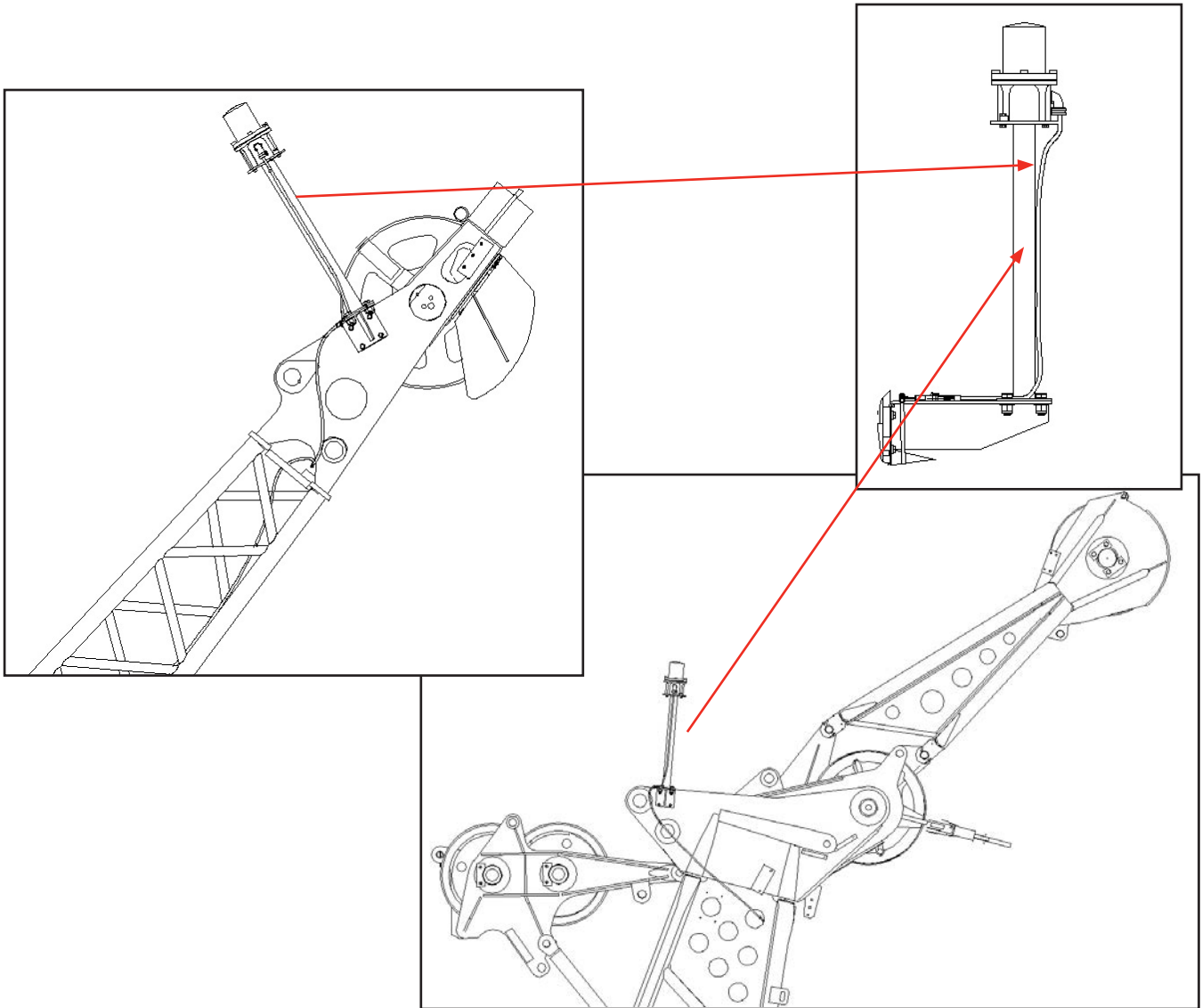


## Notes

For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.

# Lights, boom position

- Boom position lights on boom point, jib point, fixed mast or jib strut. Consists of light(s), wiring, mounting hardware and battery charger with power receptacle.



## Notes

For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.

# Lights, boom

- > Boom lighting consists of multiple lights mounted on the boom to illuminate areas under the boom. Power for lights come from generator assembly.



## Notes

Number and type of lights to be specified by customer. See generator assembly for description. For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.



# Lights, rotating bed

- > Rotating bed lighting consists of multiple lights mounted on the rotating bed to illuminate areas around the machine. Power for the lights come from the generator assembly.

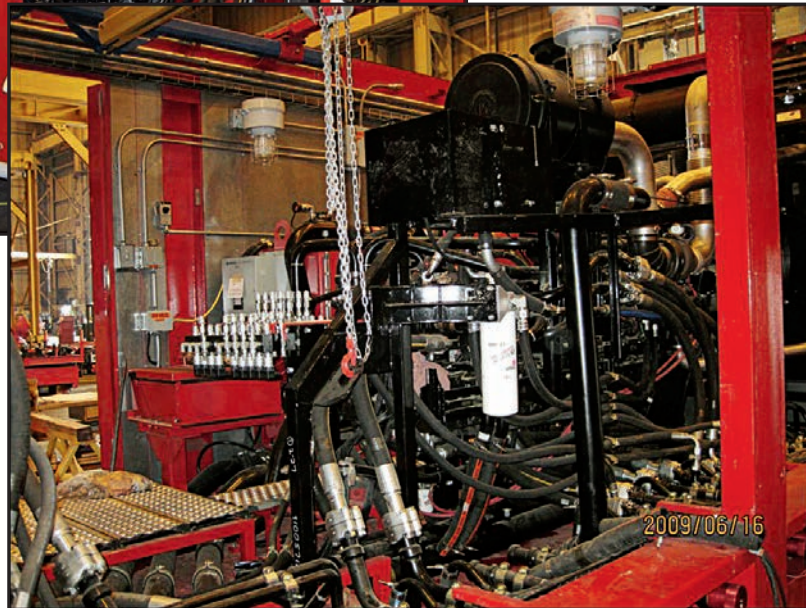
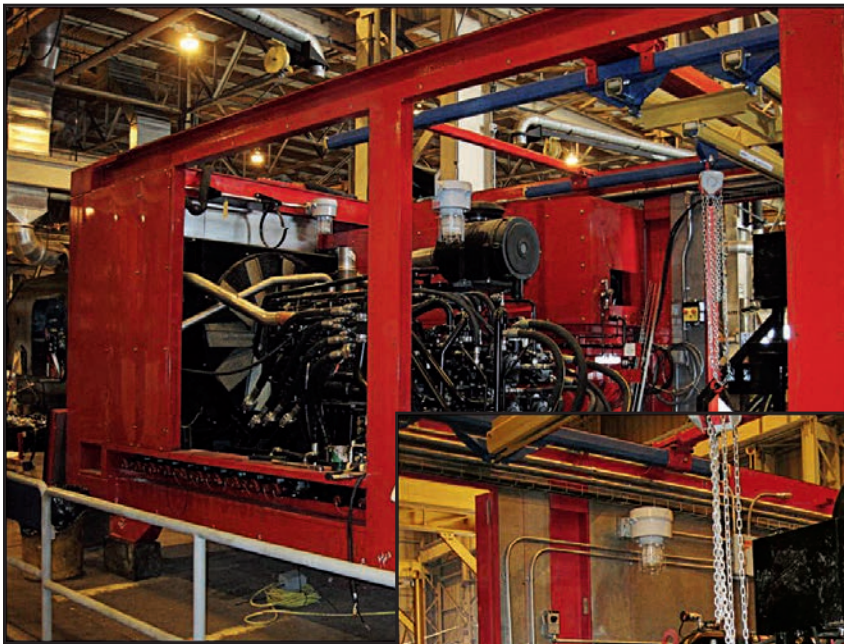


## Notes

Number and type of lights to be specified by customer. See generator assembly for description. For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.

# Lights, service

> Service lights on rotating bed to illuminate components for service work.

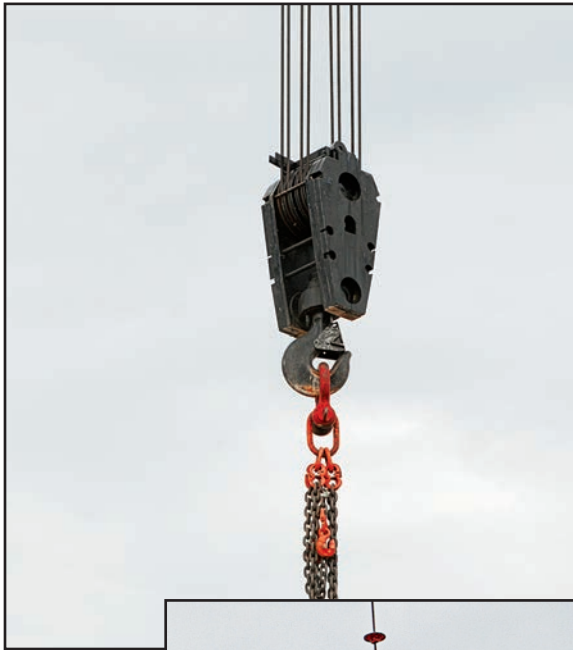


## Notes

Number and type of lights to be specified by customer. For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.

# Load block/weight ball

- > Load block/weight ball designed to customer requirement: overhaul weight, duplex hook, quick reeve and GOST approved retention of hook nut.



## Notes

For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.



# Mast lay down

- Design to allow for fixed mast to lay down on boom for moving under obstructions. Consists of special procedures and support components.



## Notes

For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.

# Operator's cab, elevated

- Elevated operator's cab allows operator to see over piers, boat rails or tunnel jobs. Consists of ladders, handrails, platforms and rotating bed modification to support the structure.

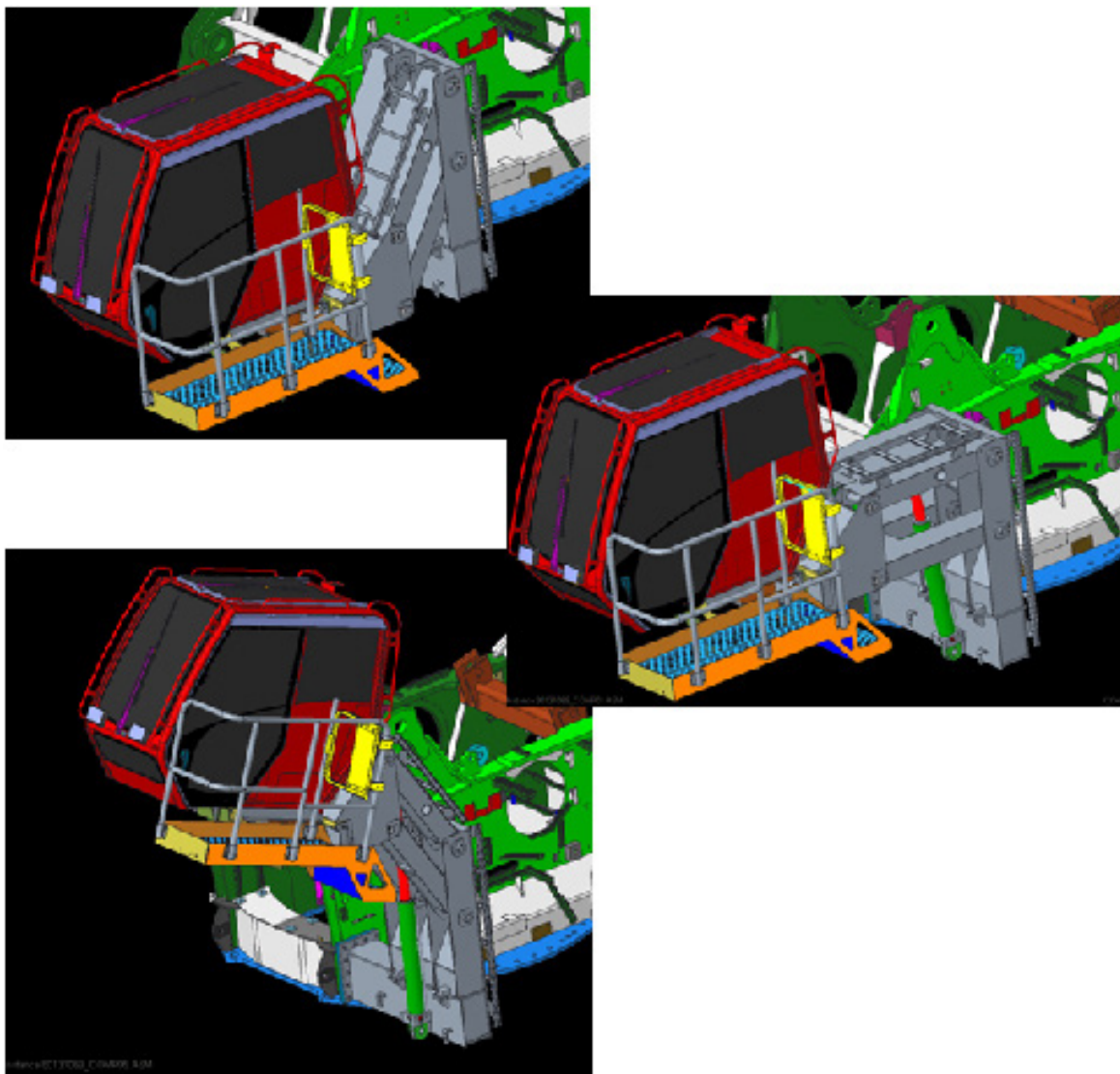


## Notes

Contact Lift Solutions with cab height requirements. For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.

# Operator's cab, multi-position

- Multi-position operator's cab allows operator height choices to see over obstructions. Consists of handrails, platforms, cab arm, and rotating bed modification to support the structure.



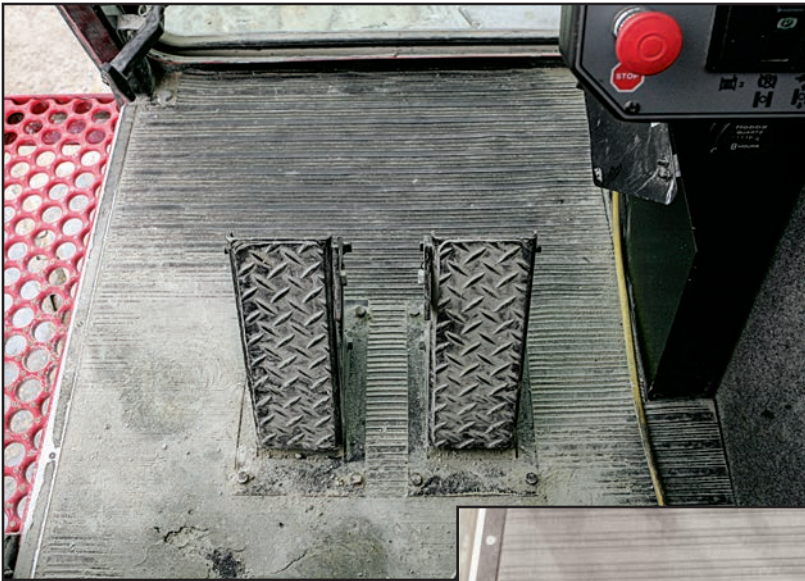
## Notes

Contact Lift Solutions with cab height requirements. For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.



# Pedals, travel

- > Foot pedals allow operator to travel while booming, swinging or running hoist drums. Consists of foot pedals mounted in cab floor plate.

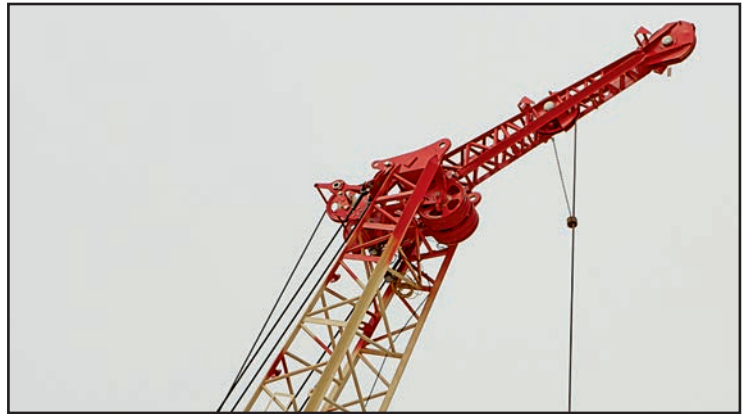


## Notes

For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.

# Personnel handling

- Consists of a drum with wire rope, rope guides, special detachable upper boom point with single sheave for whip line and second single sheave for personnel handling line. Optional emergency lowering capability available for customer supplied or Manitowoc supplied emergency backup power.

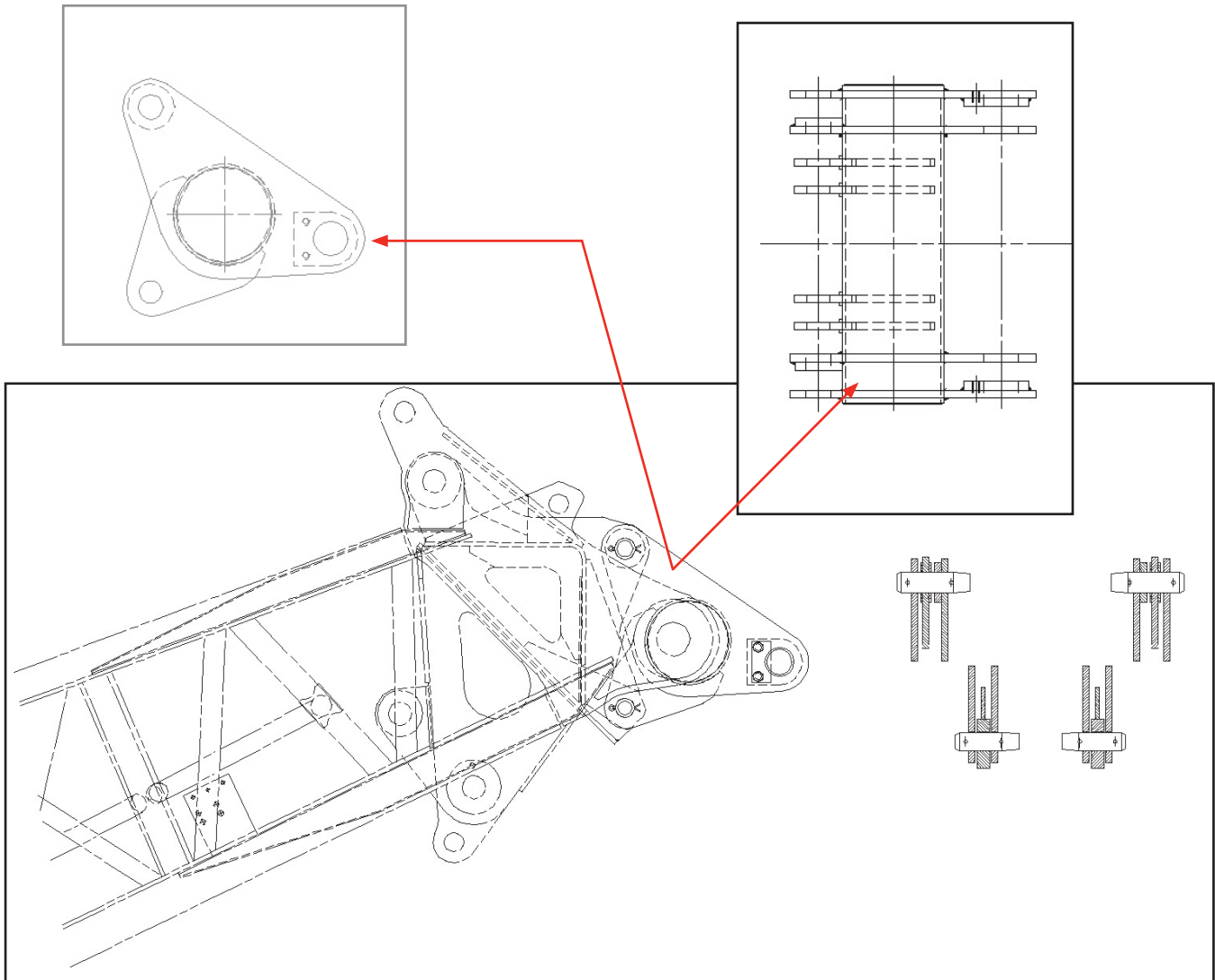


## Notes

See Emergency Backup Power for related descriptions regarding this solution. For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.

# Pile lead adapter

- > Pile lead adapters are designed to connect fixed leads to a boom top. Consists of weldment and/or links and optional hydraulics to control batter..



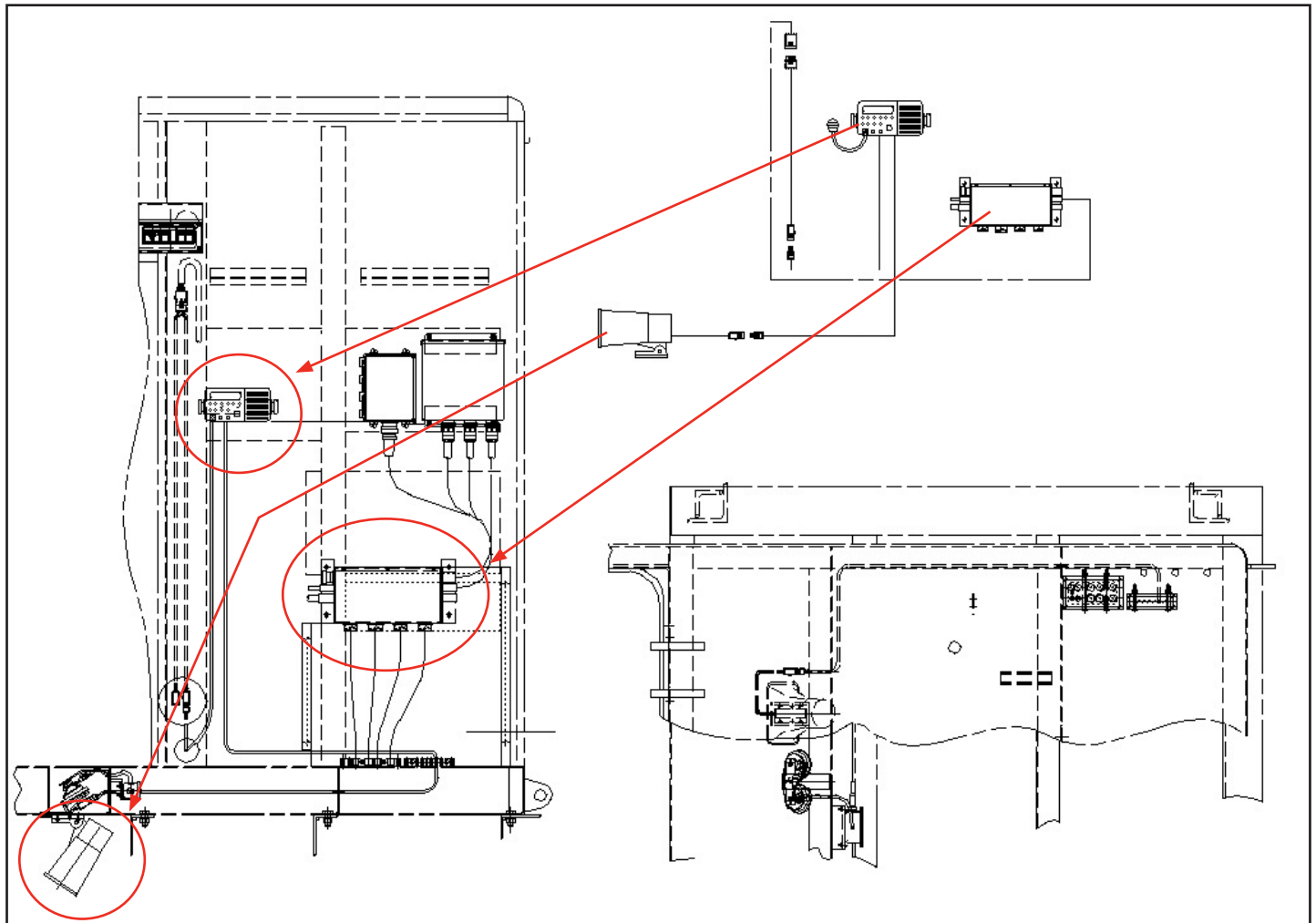
## Notes

Contact Manitowoc with the make and model of your pile driver for an adapter to match. See hydraulic equipment/attachments for hydraulic description. For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.



# Public Address (PA) system

- PA system allows communication from the operator to support crew. Consists of cab mounted microphone, loudhailer and speaker.



## Notes

For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.

# Rated Capacity Limiter, external display

- Externally mounted display of RCL/RCI data for crew visibility. Consists of display screen visible to work crew.

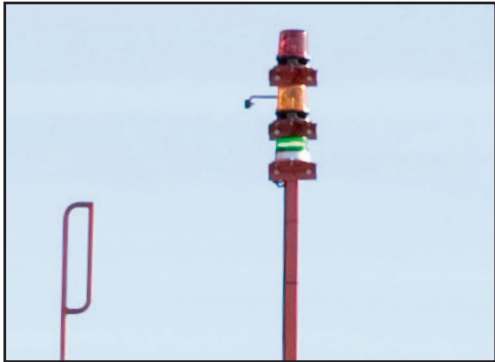


## Notes

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# Rated Capacity Limiter, light bar

➤ Light bar displaying a green/yellow/red light indication based upon percentage of rated capacity.



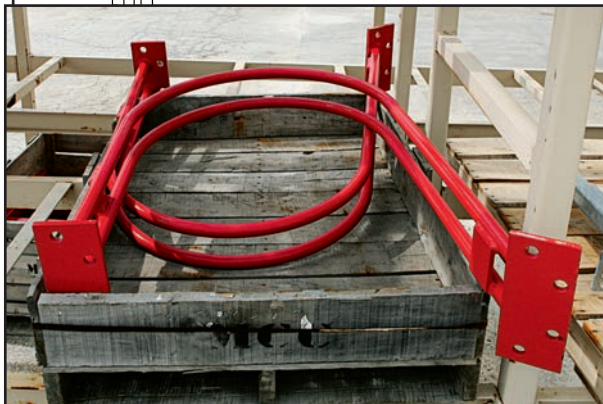
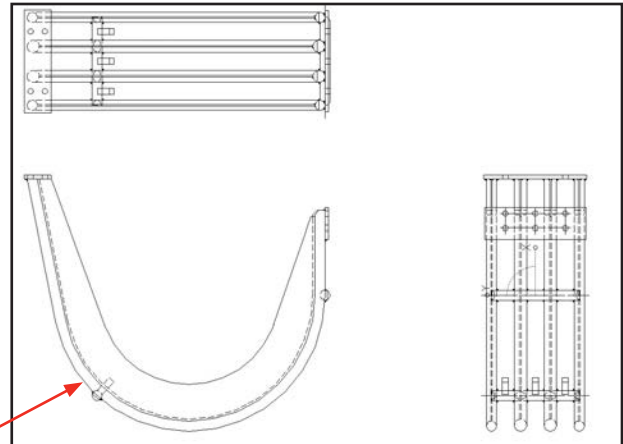
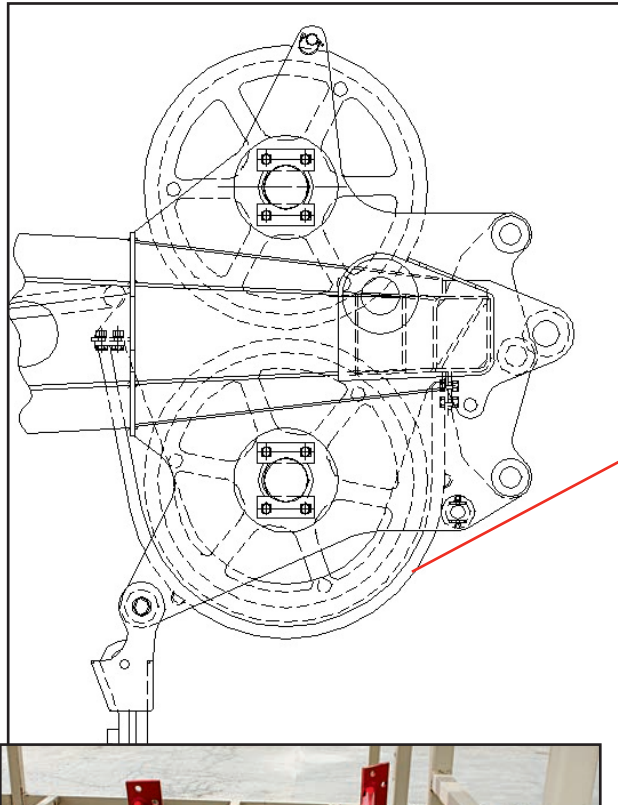
## Notes

For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.



# Rope guards

➤ Designed to keep hoist rope on the sheaves.



## Notes

Contact Manitowoc regarding machine operation for guidance on rope guards. For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.

# Set-up remote control

- > Special design remote control, wired or wireless, to control the assembly or disassembly of the crane.

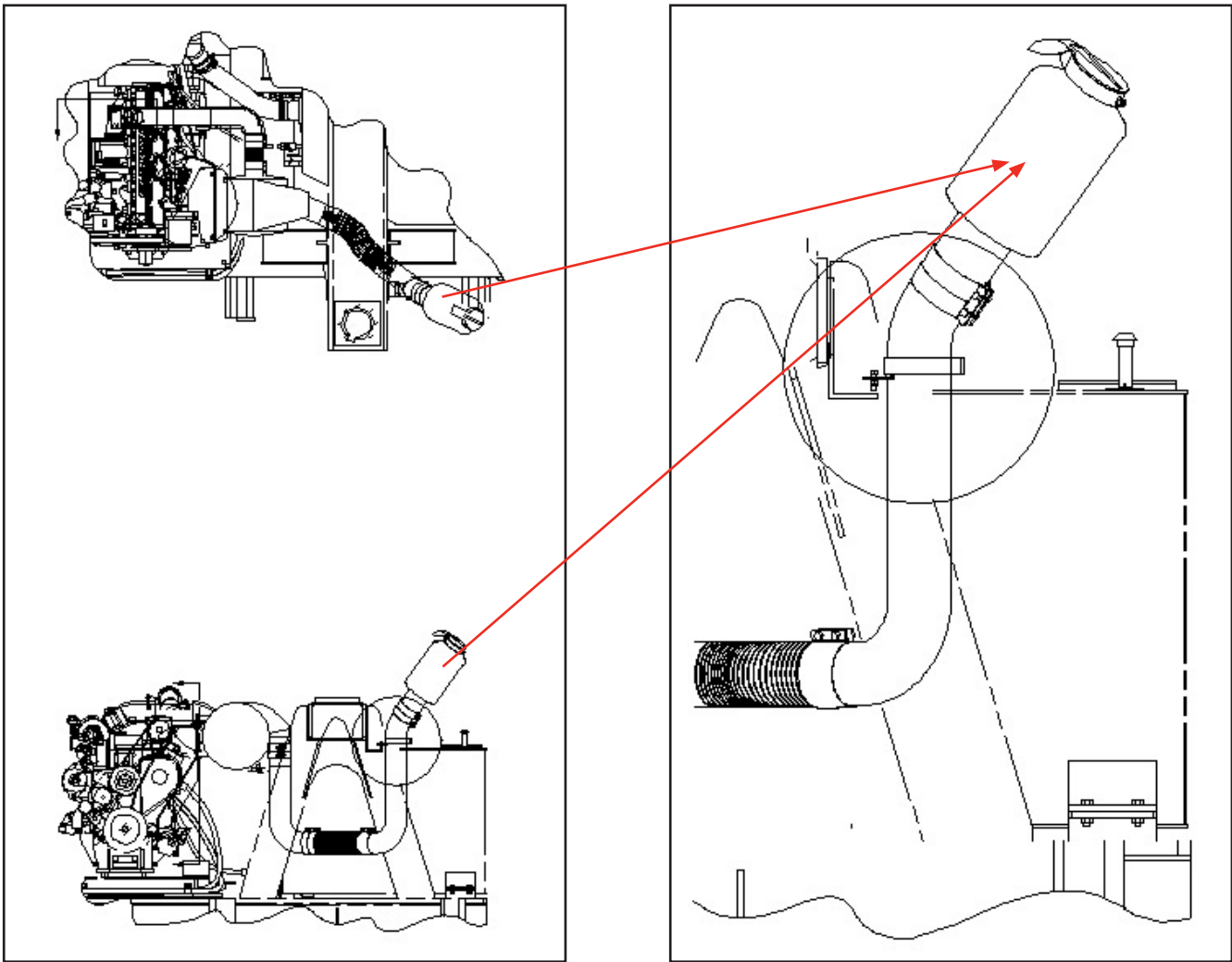


## Notes

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# Spark arrestor

> For job sites requiring spark arrestor technology.



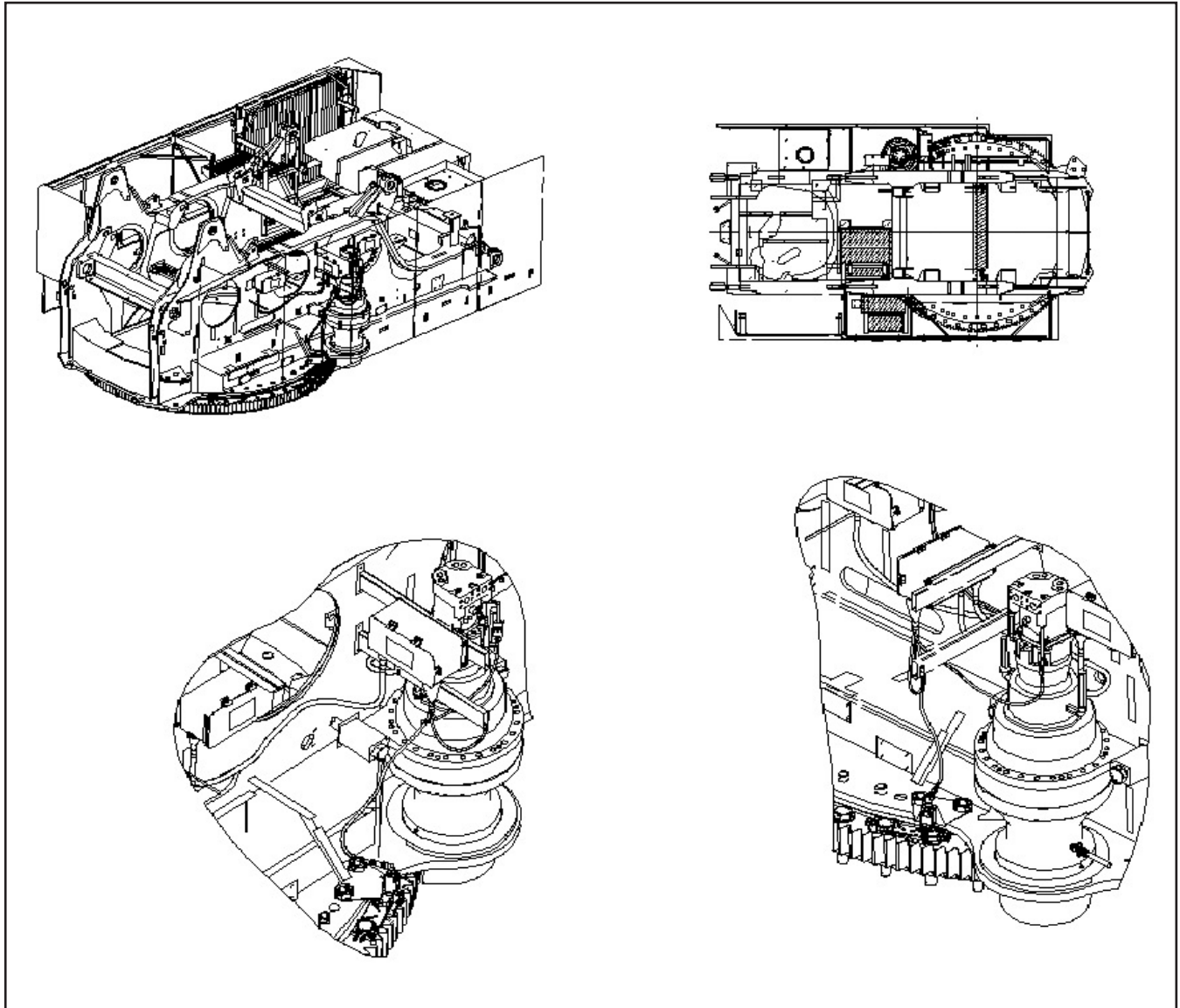
## Notes

For Tier III and lower engines. For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.



# Swing limiter

> To set swing boundaries, electronic and mechanical swing limits are available for your crane.

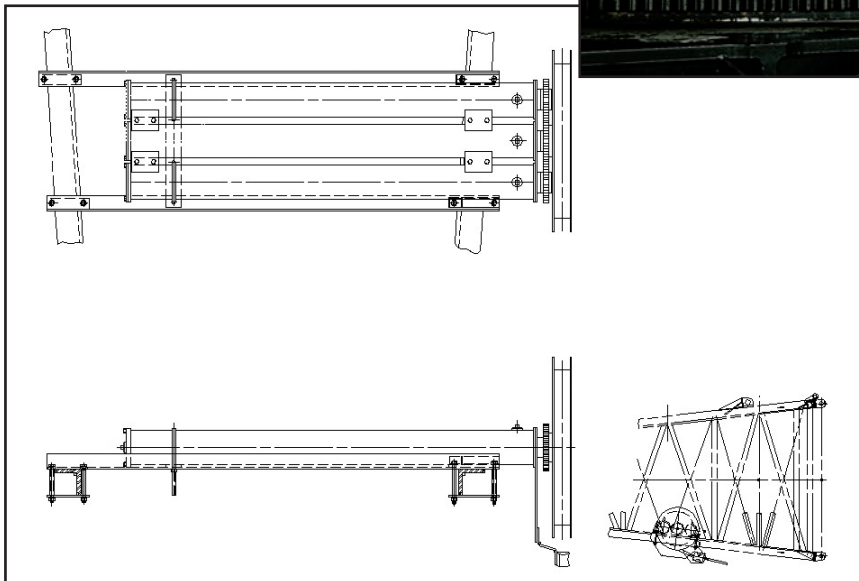
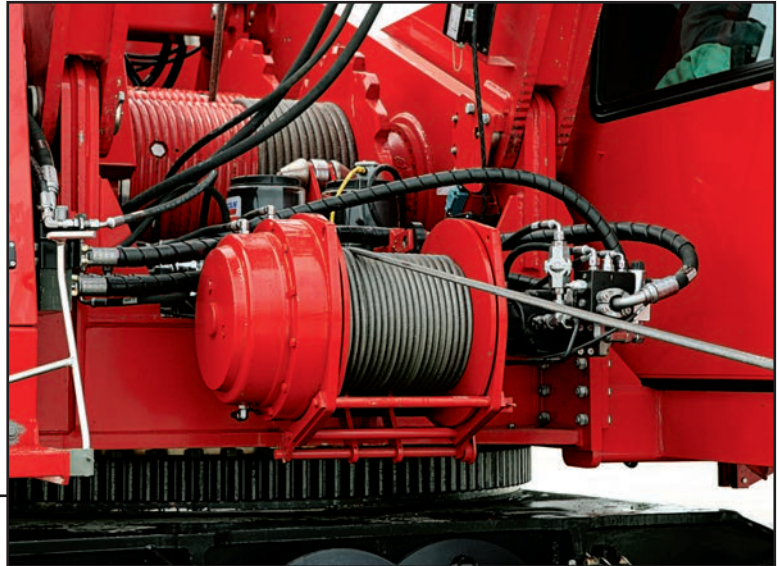


## Notes

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# Tagline

- For clamshell/duty-cycle work where bucket or grab control is required. Consists of spring loaded or hydraulic tagline.

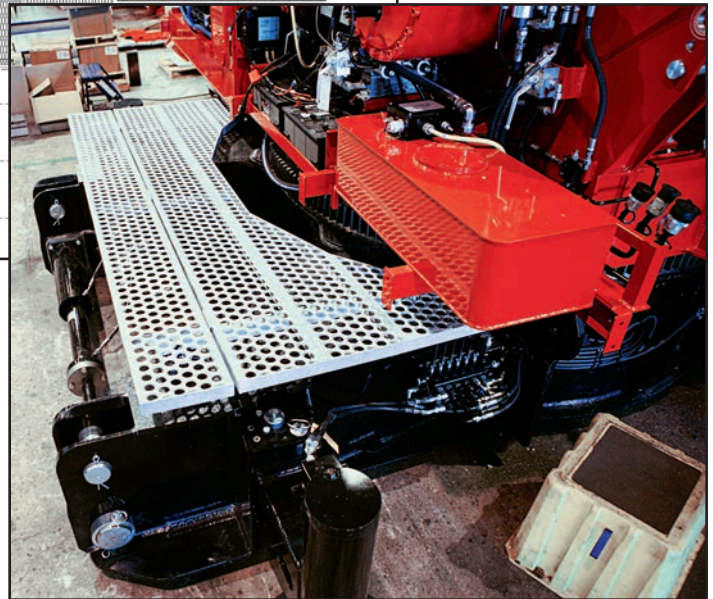
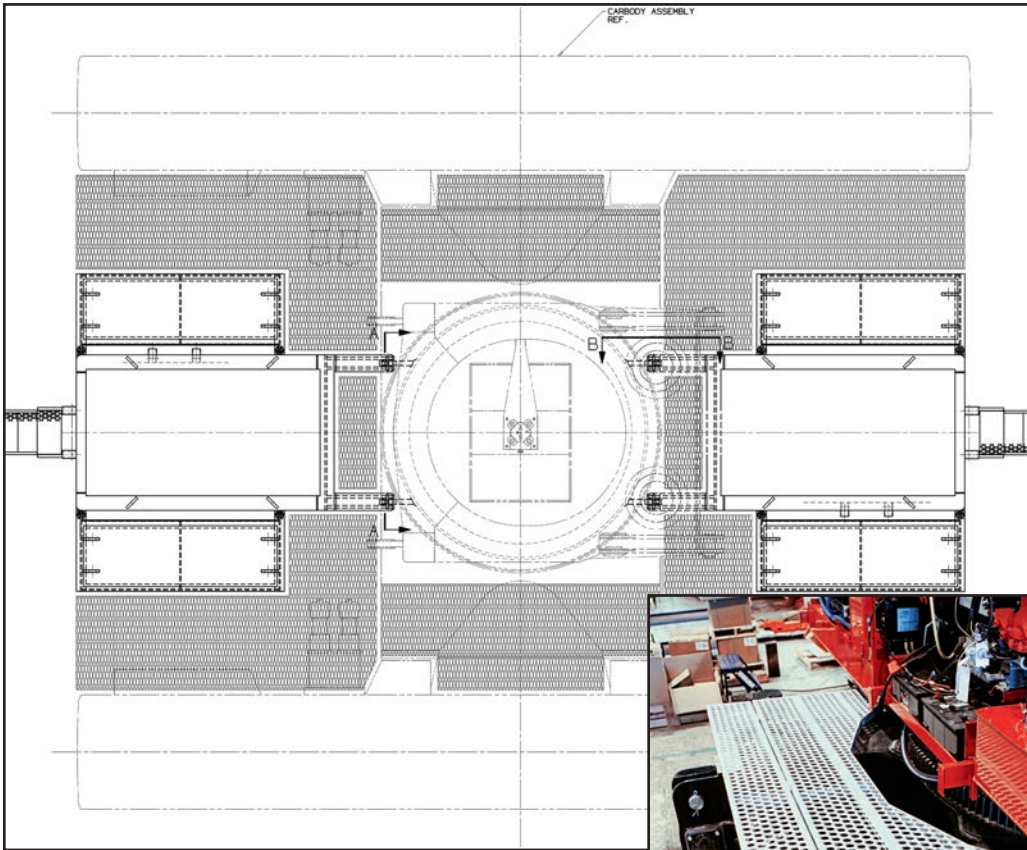


## Notes

For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.

# Walkways, carbody

> Special walkways are available on carbody to access machinery or perform required inspections.



## Notes

For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.



# Walkways, rotating bed

- Special walkways with handrails are available on rotating bed to access machinery or perform required inspections.

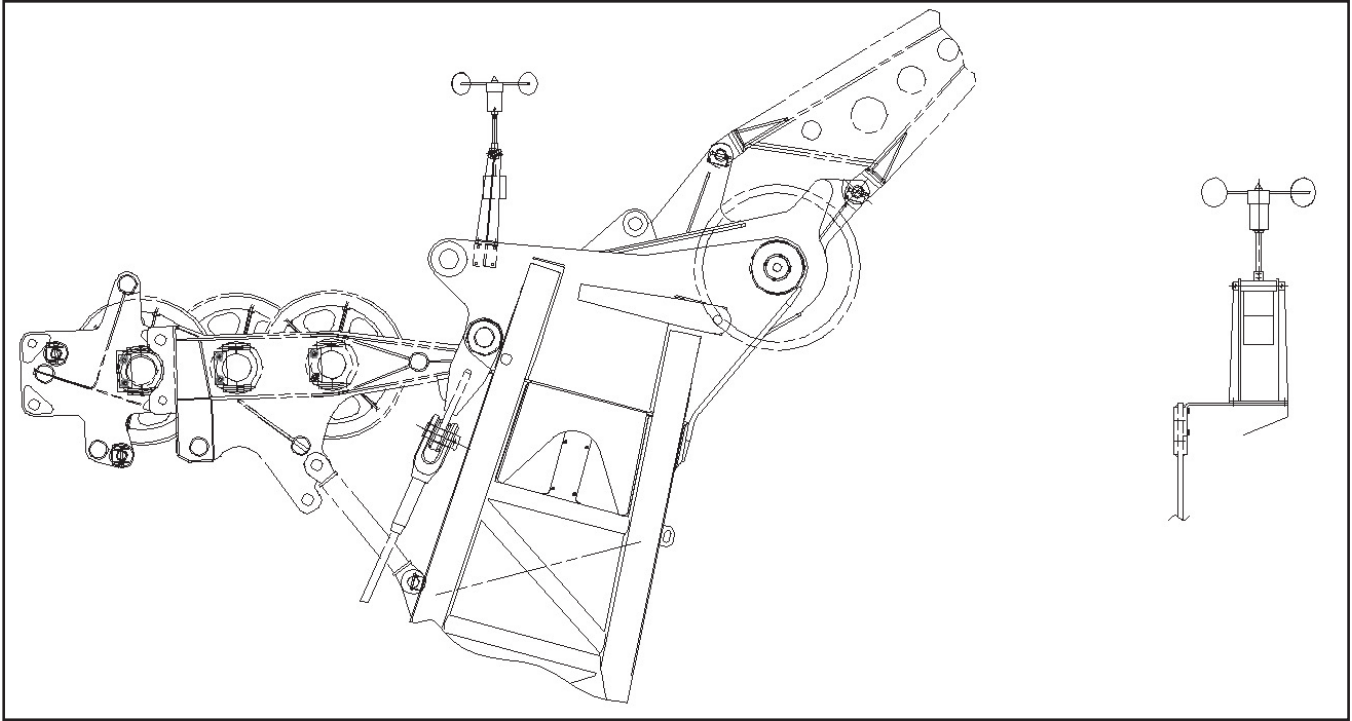


## Notes

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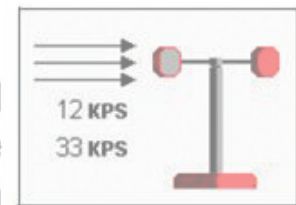
# Wind speed alarm

> An audio alarm is available to enhance the standard wind speed indicator.



## **Wind Speed Indicator**

Wind speed icon displays the steady wind speed and maximum gust wind speed. The indicator is reset with Confirm button in **level 3**.



## **Notes**

For pricing and lead time, please contact your local dealer or the Lift Solutions Team with specific product requirements.





**Lift  
Solutions®**



# The Manitowoc Company, Inc.

## Regional headquarters

### Americas

Milwaukee, Wisconsin, USA

Tel: +1 414 760 4600

Shady Grove, Pennsylvania, USA

Tel: +1 717 597 8121

### Europe and Africa

Dardilly, France - TOWERS

Tel: +33 (0) 4 72 18 20 20

Wilhelmshaven, Germany - MOBILE

Tel: +49 (0) 4421 294 0

### APAC

Shanghai, China

Tel: +86 21 6457 0066

Singapore

Tel: +65 6264 1188

### Middle East and India

Dubai, UAE

Tel: +971 4 8862677

This document is non-contractual. Constant improvement and engineering progress make it necessary that we reserve the right to make specification, equipment, and price changes without notice. Illustrations shown may include optional equipment and accessories and may not include all standard equipment.

