Part # 99904983

Refuse Container with Loader Operation & Safety Manual

Generation 2

Rev 20120105

IOWA MOLD TOOLING CO., INC.
PO Box 189
Garner, IA 50438
Tel: 641-923-3711 FAX: 641-923-2424
Website: http://www.imt.com

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Revisions

DATE	LOCATION	DESCRIPTION
20120105	THROUGHOUT	ECN 11628 - UPDATED STABILIZER WORDING.

CHAPTER 1

Introduction

WARNING

READ YOUR MANUAL!! FAILURE TO READ, UNDERSTAND AND FOLLOW ANY SAFETY PROCEDURES APPLICABLE TO YOUR EQUIPMENT MAY RESULT IN EQUIPMENT DAMAGE, SERIOUS INJURY, OR DEATH.

Follow all safety procedures in this refuse container with loader operation manual as well as the crane, hoist, chassis, and any other applicable manuals.

In addition to reading the manual, it is your responsibility to become familiar with government regulations, hazards, and the specific operation of your equipment. Use caution and common sense while operating and maintaining the equipment and follow all safety procedures and regulations. Treat this equipment with respect and service it regularly.

MODIFICATIONS

Modifications to your equipment must be performed with IMT approved accessories, parts and optional equipment. If in doubt, contact IMT prior to making any modifications. DO NOT alter or modify any safety device! All safety devices must be inspected, tested and maintained in proper working condition.

Decals regarding safety and operation are considered safety equipment, and must be kept clean and legible.

The equipment owner and/or designated employee is responsible for informing all operators, maintenance personnel, and others involved in equipment operation about the safe operation and maintenance of the equipment. If questions arise concerning safe operation, contact IMT or your IMT distributor for clarification.

WARRANTY

Warranty of this unit will be void on any part of the unit subjected to misuse due to overloading, abuse, lack of maintenance and unauthorized modifications. No warranty - verbal, written or implied - other than the official, published IMT new machinery and equipment warranty will be valid with this unit.

NOTICE TO THE OWNER / USER

If your equipment is involved in a property damage accident, contact your IMT distributor immediately and provide them with the details of the accident and the serial number of the equipment. If an accident involves personal injury, immediately notify your distributor and IMT Technical Support at:

IOWA MOLD TOOLING CO., INC.
500 HWY 18 WEST
GARNER, IA 50438

641 - 923 - 3711

MANUAL STRUCTURE

Throughout this manual, three means are used to draw the attention of personnel. They are NOTEs, CAUTIONs and WARNINGs and are defined as follows:

NOTE

A NOTE is used to either convey additional information or to provide further emphasis for a previous point.

CAUTION

A CAUTION is used when there is the very strong possibility of damage to the equipment or premature equipment failure.

WARNING

A WARNING is used when there is the potential for personal injury or death.

Daily Safety Inspections

Use the following list as a guide when you are inspecting your unit at start-up and during operation, and log your inspection results using the Crane Log (IMT Manual No. 99900686) or the inspection checklist in the reference section of this manual:

1 Vehicle - Check oil level, battery, lights, brakes, and tires for inflation, pressure, cuts, and loose or missing wheel lugs.

2 Safety Accessories - Check for proper function, oil levels, leaks and malfunctions.

3 Hydraulic Oil Reservoir - Check for proper oil level, above the bottom of the reservoir within the screened area. Check for leaks and blockages.

4 Weldments - Check visually for damage, especially cracks or breaks in welds.

5 Cylinders - Check for leakage and scored rods.

6 Fasteners - Check pins, sheaves, nuts and bolts for breakage, excessive wear and tightness.

7 Hooks - Check for the presence of a safety catch, twists, cracks, or damage.

8 Ropes & Slings - Check for frayed edges, broken strands, kinks, flat spots, and end attachments.

9 Covers & Guards - Check for missing or improperly maintained covers and guards.

10 Remote Control - Check all remote functions for function and corrosion.

11 Operation Placards and Safety Decals - Check for illegible or missing decals and placards. Refer to the Decal section of this manual for more information on the required decals.

12 Work Area - Check for hazards including powerlines, obstructions, etc.

13 Replace or repair any items as needed prior to equipment operation.

CHAPTER 2

Operation

In This Chapter

Safety & Pre-Operation Checklist

Your refuse container with crane is an effective waste-handling machine, but you must operate it safely.

DANGER

DO NOT operate the crane unless the clamps pins are engaged! Press and hold the "Crane Mode" button on the vertical PTO unit (power tower) in the cab to close the clamp pins.

Follow all safety instructions in the crane and hoist manual in addition to those listed here.

Once the pre-operation checklist has been completed, follow proper operating procedures to set stabilizers and run crane.

Crane Operation Mode

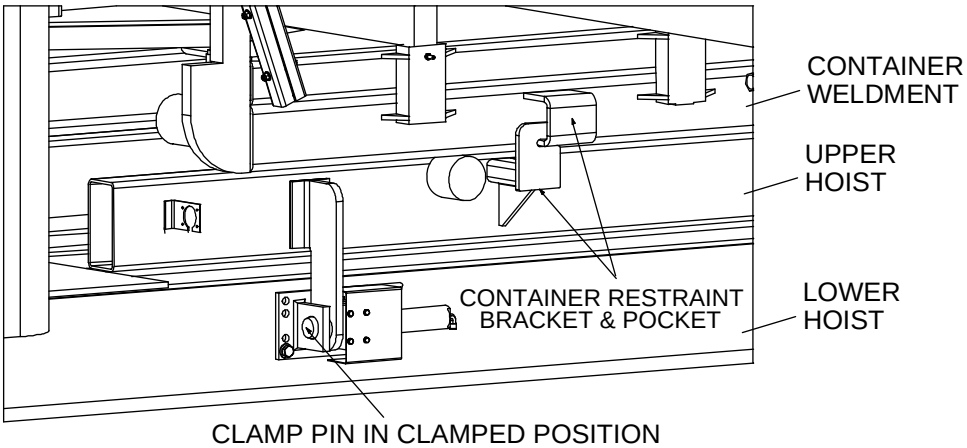
1 Engage the PTO or activate the crankshaft driven pump. (The PTO or pump switch is located in the vehicle cab.) Follow all job site safety regulations, including activating the truck hazard lights and strobe lights.

2 Follow the directions in the Roll-Off Hoist manual to pull the roll-off container onto the chassis.

CAUTION! Operate the hoist per manufacturer instructions. Operate only one function at a time.

Before continuing, visually check that the hook on the container has contacted the stops at the front of the roll-off hoist, and that the container restraint brackets on both sides of the roll-off container are interlocked with the pockets on the hoist.

NOTE: The roll-off container is secured to the upper hoist using container restraint brackets which hook into the pockets on the upper hoist. The upper hoist is secured to the lower hoist using clamping pins. Both the restraint bracket and the clamping pins, on both sides of the vehicle, must be securely engaged between the hoist and the container before operating the crane.



Front of roll-off container is secured in hooks on hoist.

Container restraint bracket is engaged in pocket on hoist.

3 Disengage the PTO or crankshaft-driven pump.

4 Move the hydraulic hoses out of the way. Cinch ratchet strap at both sides of the rear section of the roll-off. This will secure the roll-off container and prevent instability.

CAUTION! Avoid Equipment Damage! Use the ratchet straps!

5 Hook up the electrical and hydraulic connections for the crane. The hydraulic connections are located at the rear of the crane, and the electrical connection is at the front of the crane. The crane cannot be operated without them.

NOTE! Be sure to hook up the connections in the proper order.

a) Large coupling (return)

b) Small coupling (pressure)

⚠CAUTION

AVOID EQUIPMENT DAMAGE!

DISENGAGE PTO before connecting or disconnecting wires and hoses.

ROLL-OFF REMOVAL INSTRUCTIONS

NEVER leave roll-off partly connected!

1) Disconnect wiring.
2) Disconnect small coupling (pressure).
3) Disconnect large coupling (return).

Reverse order to connect.

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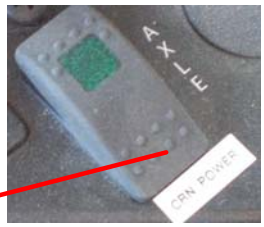
Electrical wiring connector

Ratchet strap

Hydraulic hoses

6 In the cab, engage the PTO and activate the crane by turning on the *Crane Mode* switch located on the power tower in the cab.

PTO Switch



Crane Mode Switch

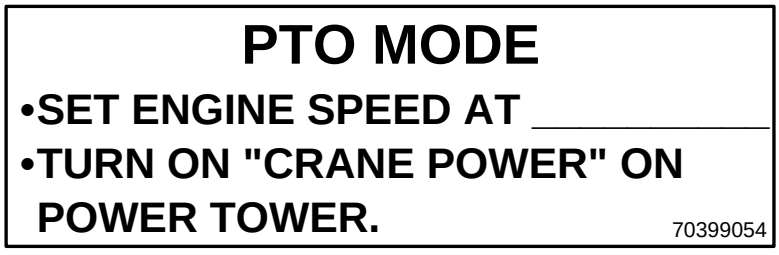
NOTE: Turning on *Crane Mode* will cause the clamp pins to engage in the roll-off container brackets on each side of the vehicle.

Visually verify that both clamp pins have engaged.

Verify clamp pin has engaged in hoist brackets. Check both sides of vehicle.

DANGER! Pinch Point! Do not place anything in the path of the clamping pins which secure roll-off.

7 Elevate the engine RPM (using cruise or speed control) to run engine at sufficient speed to power crane. There is a decal on the dash which lists the recommended RPM.



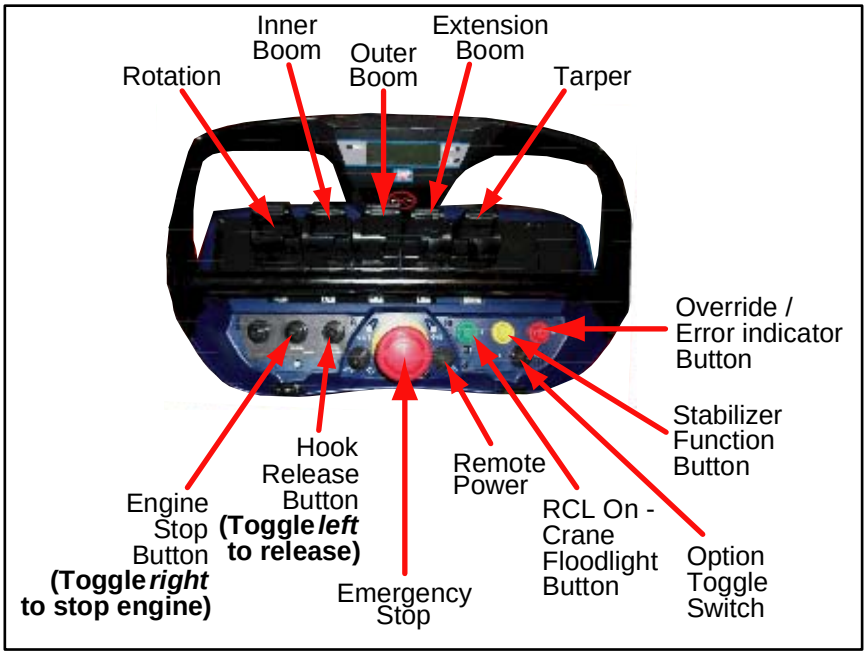
8 Follow all instructions in the crane manual and on quick guides for safe crane operation.

Pre-Operation Checklist

Make sure each of these tasks is completed before operating the loader on the refuse container with loader.

	TASK	VERIFICATION
1	Pull roll-off container to front of truck.	Visually check to see the front of the roll-off container has contacted the stops. Visually check that container restraint bracket has locked into pocket on roll-off container.
2	Connect hoses and strap at rear of truck.	Visually check that hoses are connected.
3	Connect electrical wire at front of truck.	Visually check that wire is connected.
4	In truck cab, press the green *Crane Mode* button on the power tower in the cab to activate clamping pins.	Visually check that the clamp pins have engaged in the clamp pin brackets. Inspect both sides of the container. **CAUTION:** If you have parked on a slope such that the chassis is tilted, the pin may only engage on one side of the vehicle. Move the vehicle to a location which is more level so that both pins engage.

Crane Remote Control



Use the crane remote to set up the stabilizers, run the crane, release the hook, and to perform other crane operations. To start the remote control:

1 Pull out all stop buttons on the RCL control panel and radio remote.

2 Release all control levers to a neutral position.

3 Turn on the remote by pressing and holding the ON button for 2 seconds. (Black button for remote power.)

4 Activate the RCL system by pressing the green button on the front of the remote.

5 Follow the directions in the appropriate sections for additional crane operations.

NOTE

The *Engine Stop* button turns off the truck engine immediately. It will stop the truck engine, which will stop the PTO and hydraulic flow. Use *Engine Stop* in case of a hydraulic hose failure to reduce mess.

The *Emergency Stop* button stops crane function. Use *Emergency Stop* to stop crane operation immediately. *Emergency Stop* stops the crane only, and does not affect the truck engine.

Pneumatic-Hydraulic System

The Refuse Container with Loader (G2 and G3) includes hoist to crane interlocks which activate automatically when the *Crane Mode* switch on the power tower in the cab in turned on. (The green light on the switch will light.) Turning on the *Crane Mode* will cause the pneumatic clamp pins on each side of the container to lock the container to the hoist, and will divert all hydraulic flow from the hoist to the crane. When the *Crane Mode* switch is on, no hoist functions can be operated. When the *Crane Mode* switch is off, the clamp pins will retract and hydraulic flow will be diverted to the hoist.

Crane Operation

Complete details on the crane, remote, and RCL are provided in the following manuals:

- 99904990 - Refuse Container with 14-98SL Crane Parts Manual
- 99904591 - Material Handling Operation, Safety & Maintenance Manual
- 99904596 - RCL5300 Manual
- 99903518 - Radio Remote Control Manual

In addition, IMT has developed a set of quick reference guides which can be easily carried with the operator for reference in operating the refuse container with crane unit. The complete set is part number 95723558. The set includes the following guides:

- 71399055 - Quick Guide - Crane Pre-Operation Checklist
- 71398895 - Quick Guide - Crane Start-up
- 71398896 - Quick Guide - Stabilizer Set-up
- 71396471 - Quick Guide - Crane Stow/Unstow
- 71398897 - Quick Guide - Overload Conditions
- 71398898 - Quick Guide - Absolute Stop
- 71398899 - Quick Guide - Emergency Mode
- 71399056 - Quick Guide - Transport

NOTE

The crane operation notes in this manual are provided as a reference only, and cannot be substituted for a thorough review of the crane, RCL5300 and Radio Remote Control manuals.

Extending Stabilizers

Your refuse container with loader is equipped with power-out / power-down stabilizers with a swing rotation system. You must properly set the stabilizers before operating the crane.

DANGER

Avoid Death or Serious Injury! Close clamps before operating stabilizers or crane.

CAUTION

Avoid equipment damage! Check for obstructions before extending the stabilizers.

1 Make sure:

a) The PTO is engaged or the crankshaft-driven pump is activated.

b) The hydraulic hoses and electrical harness are connected.

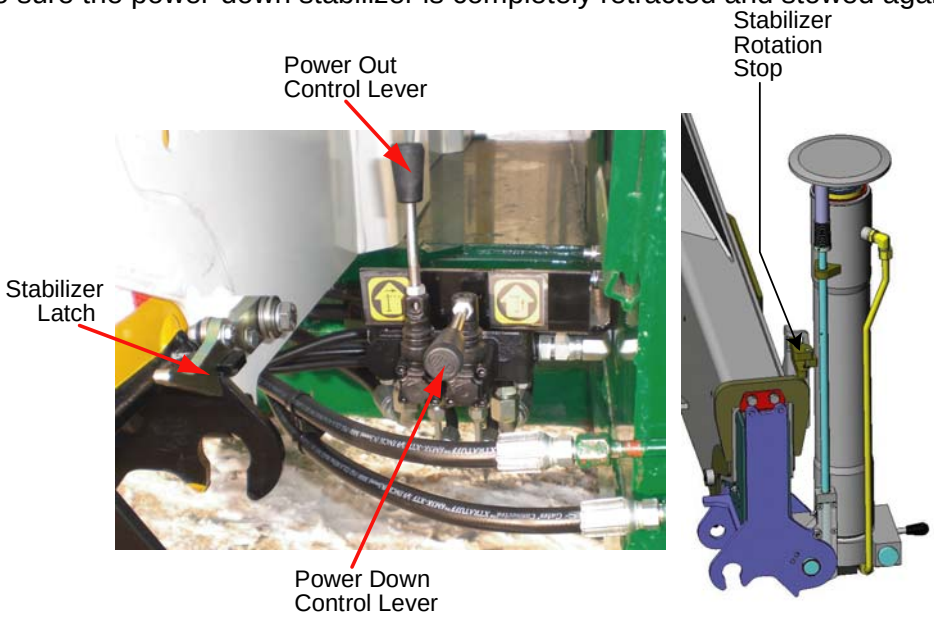
c) The green *Crane Mode* switch on the power tower is on.

d) The clamps pins are completely engaged and the hoist bracket is locked into the container restraint pocket..

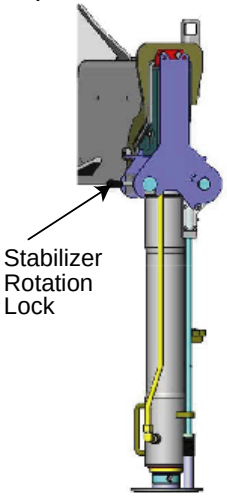
e) See ***Crane Operation Mode*** (on page 8) for details.

2 The stabilizers are operated using cable controls. Stabilizers controls are located on each side of the unit. Each stabilizer must be set up individually. Per the crane operation manual, you must place the crane in *stabilizer* mode to operate the hydraulic stabilizers. To do this, press the yellow button twice on the RCL control panel or on the remote control transmitter.

3 Make sure the power-down stabilizer is completely retracted and stowed against the rotation stop.



4 Release the manual stabilizer latch on the power-out stabilizer. Fully extend the stabilizer arm, using the Power Out control lever.



Slowly operate the Power Down stabilizer control lever to automatically rotate the power-down cylinder into the downward position. When the power down cylinder foot is positioned just off of the ground, engage the locking pin at the top of the cylinder to lock it into place.

Then extend the power down stabilizer until it touches the ground per the crane operation manual.

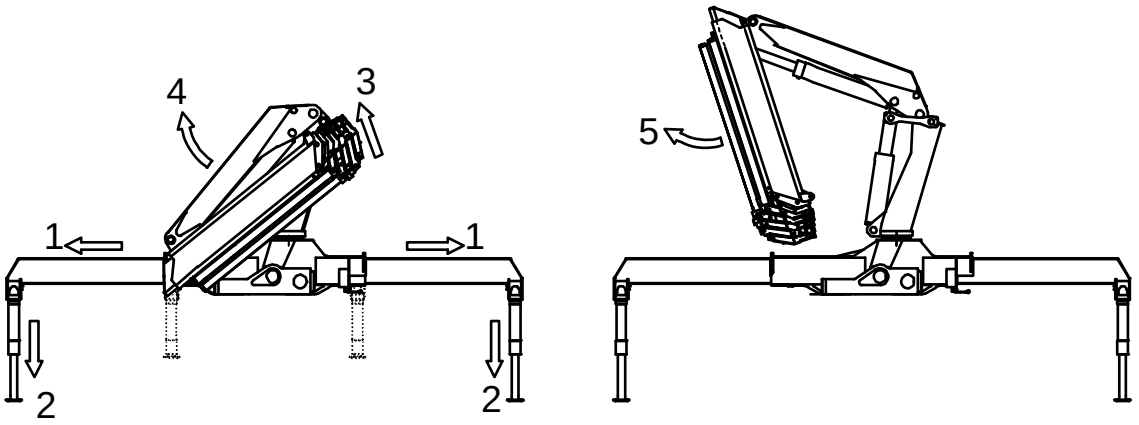
CAUTION! Avoid shearing the pin and damaging the stabilizer auto-rotate system. Operate the Power Down function slowly.

5 Avoid danger from moving stabilizers! The unit has swing-up stabilizers that extend 7-feet (2.1 m) from each side of the unit. Stand clear.

6 Repeat with stabilizer on the other side of the truck.

7 After setting the stabilizers, return the electrical system to *crane* mode to operate the crane by pressing the yellow button twice on the RCL control panel or on the remote control transmitter.

Unfolding the Loader



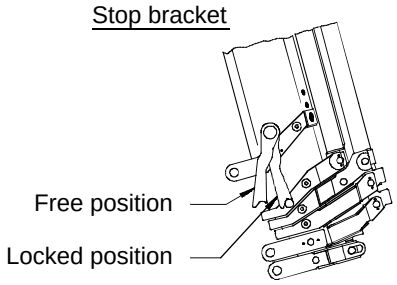
1 Fully extend the stabilizer arms.

2 Rotate and lower the stabilizer legs. Follow the steps in the section, Extending Stabilizers.

3 Using the *outer boom down* control, raise the outer boom to free it from the stowing bracket.

NOTE

The outer boom must be raised, using the *outer boom down* movement of the control, so that the outer boom is released from the bracket.



4 Raise the inner boom to free it from the bracket. Continue to raise the inner boom until it is slightly above horizontal so that the outer boom can be moved freely downwards.

5 Raise the outer boom until it is free of the base.

Crane Capacity

The IMT crane is designed to lift specific loads. These loads are defined on the capacity placard mounted near the operator's station and on the crane. Exceeding the limits presented on the capacity placard will create severe safety hazards and will shorten the life of the crane. The operator and other concerned personnel must know the load capacity of the crane and the weight of the load being lifted!

The capacity chart for each model is located in the specific crane technical specifications manual and on placards on the crane and body.

WARNING

NEVER EXCEED THE RATED LOAD CAPACITY OF THE CRANE OR RIG RELEASE HOOK. DOING SO WILL CAUSE STRUCTURAL DAMAGE AND DAMAGE TO RIG RELEASE HOOK WHICH CAN LEAD TO DEATH OR SERIOUS INJURY.

NOTE

CAPACITY PLACARDS ARE INTENTIONALLY LOCATED NEAR THE OPERATOR TO ASSURE READY REFERENCE IN DETERMINING WHEN A LOAD CAN OR CANNOT BE HANDLED.

LOAD LIMIT INFORMATION ON THE CAPACITY PLACARD IS FORMULATED ON 85% OF TIPPING. TIPPING REFERS TO THE CRANE ACTUALLY TIPPING WITH ITS OPPOSITE STABILIZER AND TIRES HAVING BROKEN CONTACT WITH THE SURFACE.

Prior to lifting a load:

1 Determine the weight of the load.

2 Determine the weight of any load handling devices.

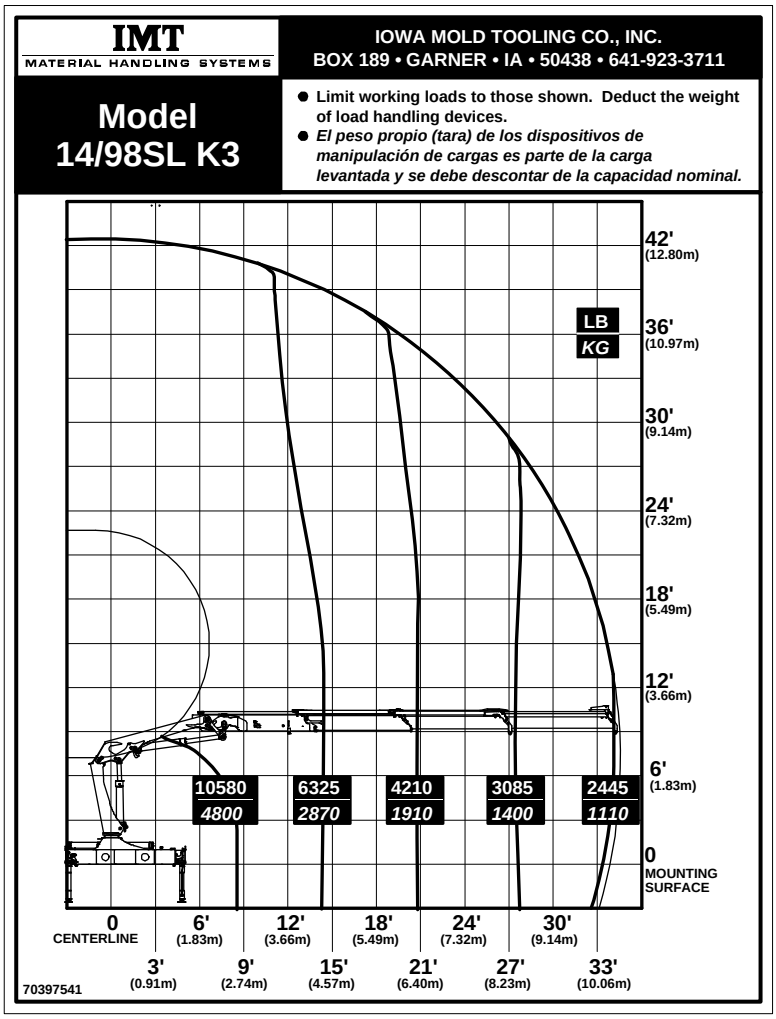
3 Add the weight of the load and the weight of the load handling devices. The sum is the total weight of the load being lifted.

4 Determine the distance from the centerline of crane rotation to the centerline of the load being lifted.

5 Determine the distance from the centerline of crane rotation to the centerline of where the load is to be moved to.

6 The actual distance used should be figured as the larger of items 4 and 5 above.

Capacity Placard



WARNING

AVOID DEATH OR SERIOUS INJURY! The rated capacity of the rig release hook is 5,000 lb (2.5 tons). Although the crane capacity exceeds 5,000 lb in certain positions, do not exceed rig release hook capacity.

RCL Errors

You may get an error code from your crane RCL (Rated Capacity Limiter) system if you bump the manual levers while operating the crane with the radio. This error will be indicated with a steady tone from the RCL system.

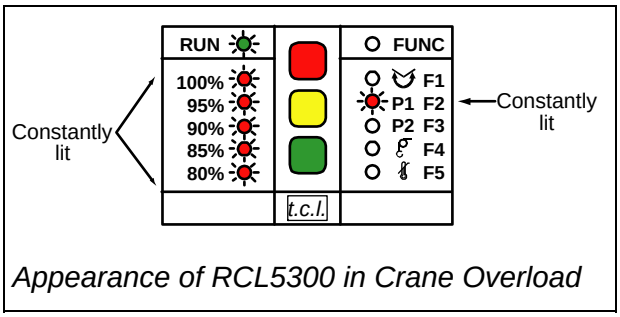
- Try to clear the error by toggling the *Crane Power* toggle switch next to the manual levers to the down (off) position. Wait several seconds.
- Toggle the *Crane Power* toggle switch to the up (on) position.

Your radio will time out during this process. When crane power is restored, press the green button on the radio to re-activate the remote and continue operating. If you still have an error code, investigate the causes of errors more completely using the RCL manual.

Crane Overload

Overload is when your crane load moment is at 100% of capacity. In overload:

- The 80% through 100% red diodes are constantly lit.
- The P1 diode is constantly lit.
- The buzzer on the remote will sound constantly.
- The loader suddenly stops working.
- The RCL display reads t.c.l. (Traditional Capacity Limitation)



Appearance of RCL5300 in Crane Overload

You can begin to get out of overload when:

- You have released all remote levers to neutral positions.
- The buzzer on the remote sounds intermittently.
- The P1 diode flashes.

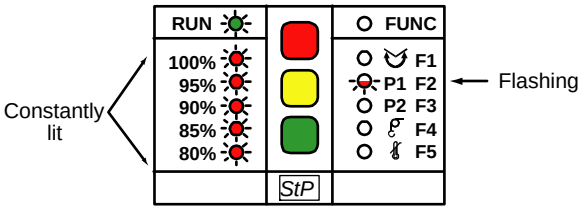
Move the crane into a position which reduces the load moment, such as boom down or extension in, to get out of overload. If the loader won't move, you can push the red override button on the RCL, and you will have five seconds to move the crane into a load reducing position.

Absolute Stop

If you do not reduce the crane load moment and continue to operate the crane in overload conditions, you will reach absolute stop. The crane will not function at all.

In absolute stop:

- The 80% through 100% red diodes are constantly lit.
- The P1 diode will flash.
- The buzzer on the remote will sound constantly.
- The RCL display reads S.t.P.

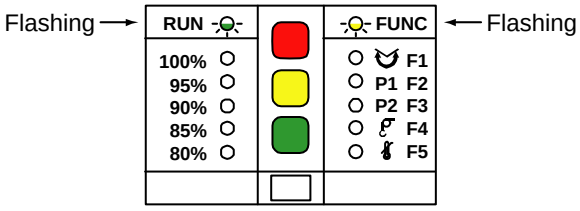


Appearance of RCL5300 in Absolute Stop

You must call an authorized service center to get your crane out of the absolute stop condition.

Crane Radio Failure

If your radio remote fails, the RUN and FUNC diodes on the RCL panel will flash. You will not be able to run the crane with the remote.



Appearance of RCL5300 during Radio Failure

To change to emergency, manual mode,

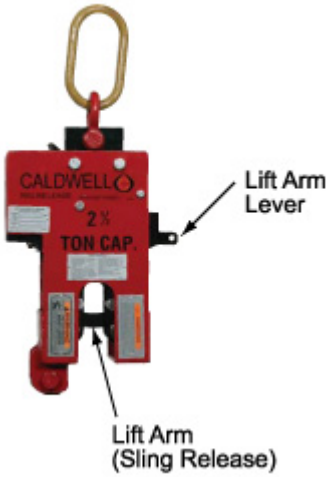
1 On the RCL panel, press and hold the yellow button while pressing the red button. The RUN and FUNC diodes on the RCL panel will still flash.

2 To verify the crane can be manually controlled, push the red button on the RCL panel. The 100% diode will flash. If it does not, repeat step 1.

3 To return to the remote control mode, repeat step 1.

Rig Release Hook

The Rig Release Hook allows you to release the rigging and set loads down from a distance. When loaded, the rig release lift arm locks the sling in place and the rigging cannot be removed. Once the load is set and the loadline is slack, you can release the load using a remote-controlled rigging disconnect, which is part of the crane remote.



Rig Release Hook Warnings

CAUTION

Avoid serious injury or equipment damage! Read and follow rig release hook instructions. Heed all rig release hook warnings.

NOTE

Crane capacity may exceed hook capacity. Do not exceed minimum capacity rating.

1. Before each use, inspect the 12VDC remote-controlled rig release hook for damage or wear. Check for bent or missing components, broken or weak springs, loose bolts, cracked welds, or worn areas. If the inspection reveals any defect, remove the unit from service and report the issue to a designated person. All components must be in place and functioning properly to ensure operation as intended. Missing or defective components may cause an unsafe lifting condition.
2. Never exceed the unit's rated capacity 5,000 lb (2.5 tons) or the riggings' capacity, whichever is less.

3 Rigging weight cannot exceed the maximum rigging load indicated on the unit. The 2.5-ton unit is capable of no more than 20 lb. of rigging weight. Excessive rigging weight prevents the torsion spring from releasing the lift arm assembly. Do not place a web sling directly on the lift arm, as the web sling material prevents proper lift arm release.

4 The minimum load for the rig release hook is 40 lb for a straight pull and 80 lb. for a basket hitch on the arm. This minimum load locks the rig release, engages the release pin linkage, and ensures the lift arm does not release unexpectedly. Lifting a load less than the minimum (40 lb - straight pull or 80 lb - basket hitch) causes an unsafe lifting condition.

5 Four extension springs are installed in the rig release hook. Do not install additional or stronger springs. Use only IMT-approved replacement springs.

6 Always use latches on all hooks.

7 Do not lift people. Do not lift higher than necessary. Do not leave load unattended while suspended.

8 Avoid entangling or catching rigging on objects.

9 When using web slings, attach a steel shackle or steel oblong to the lift arm, then attach the web sling to the steel shackle or steel oblong.

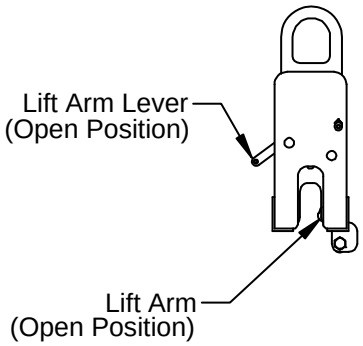
Rig Release Hook Operation

1 Lower the rig release hook to the load. Open the lift arm using the hook release function on the crane radio remote control or by pressing the green manual release button on the side of the hook.

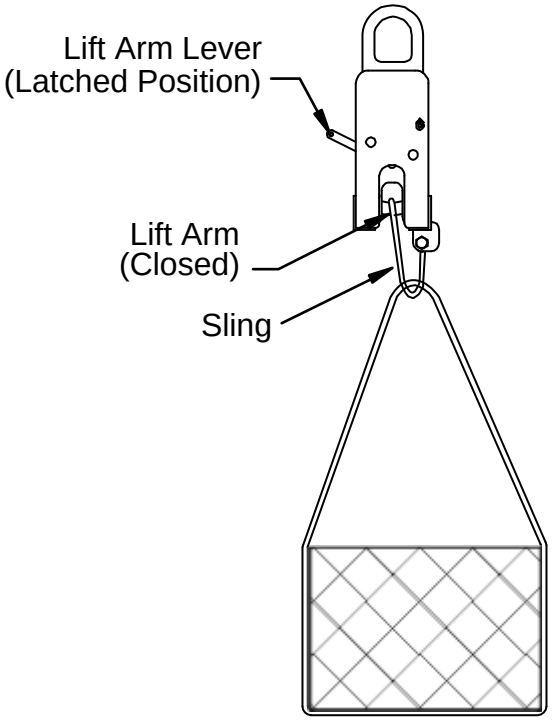
CAUTION

The hook release function on the remote will only operate when there is no load on the hook!

Avoid injury! The spring-operated lift arm on the rig release hook snaps open quickly! Keep clear.



2 Attach the sling to the load using proper hitching methods. If loading bags, route the sling strap through the handles on the bags. Attach the other end of the sling strap, with the metal oblong, to the lift arm.



3 Move the lift arm lever up to the closed position. This will close the lift arm.

CAUTION

Make sure the lift arm catch is completely closed.

4 Move the load to the desired position, keeping tension in the rigging. Carefully set the load down on the ground or in the container, in a completely supported position. The holes in the crane side of the container allow you to see the load. Lower the crane hook to create slack in the load sling. Once there is no load on the hook, use the hook release button on the crane remote or the green manual release button on the rig release hook to open the hook and release the load.

5 Avoid sling damage. Before moving the vehicle, reattach the sling to the lift arm.

Manual Release

The rig release hook is released with the crane remote control. In case of a remote electrical failure, there is a manual release button which releases the hook in a no load position. Before using the manual release, position the crane so the load is on the ground or in a supported position. Then press the green manual release button to release the load from the lift arm.

NOTE

The emergency manual release only works in a *no load* situation. The load must be supported.

Picking up a Load

1 Move the crane into position so the hook strap is centered over the bag.

2 Release the hook strap using the hook release on the transmitter.

3 Connect the hook strap to the bag. Weave the hook strap through the two straps on the bag, push the metal ring on the end of the strap into the middle of the hook, and lock the ring into place.

4 Stand clear.

5 Lift your load.

6 Retract the boom to bring the load in toward the container box.

7 Make sure the load is high enough to clear the back of the container.

8 Lower the bag into the container. Use the windows at the front of the container to position the bag in the container body.

9 Once the load is placed in the container and the straps have slack, release the hook and raise the boom.

NOTE: The hook will not release unless there is slack in the straps.

10 Move the crane toward the stowing position. When you can reach it, re-attach the metal hook ring to the end of the hook.

11 Stow the crane.

Load Weight

Your crane remote is calibrated with a 1,200 lb load with all extension booms retracted and the inner and outer boom straight out, nearly parallel to the ground. When you position another load in this position and the remote is set to indicate load weight, you can determine the weight of that load.

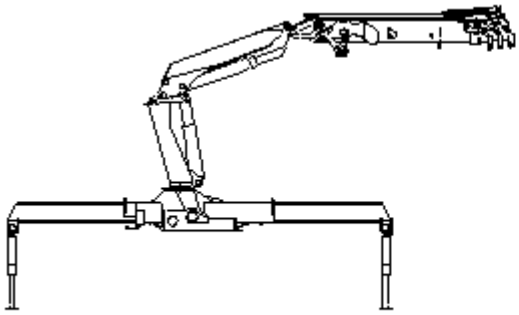
To weigh a load, position the crane as shown:

- Inner and outer boom nearly horizontal
- All extensions retracted.

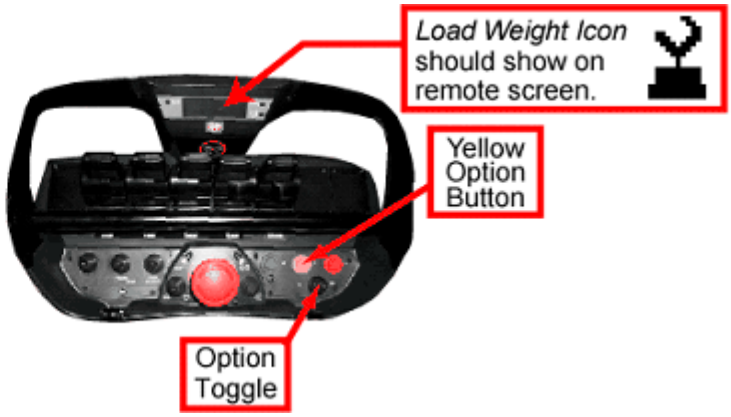
Check the remote control screen. If it shows the *Load Weight Icon*, and the crane is in the right position, the weight of the load will display in the lower right corner of the screen.

If the screen doesn't show the load weight icon,

- Flip the option toggle.
- Scroll through the screen options by pressing the yellow button until you see the load weight icon.
- Then, if the crane is in the right position, the weight of the load will display in the lower right corner of the screen.



Crane Position for Load Weight



Stowing the Loader

1 Retract all extensions

2 Rotate the loader to the stowing position, such that the alignment decals on the crane base and mast line up. (Or center the grease zerk on the bottom of the crane mast with the base.)

3 Lower the outer boom until it is positioned at the crane base. (Use the *outer boom up* lever.)

4 Lower the inner boom until it is stowed in the stowing bracket.

5 Retract and stow the stabilizers per the section on ***Retracting Stabilizers.*** (see "Retracting Stabilizers" on page 31)

Retracting Stabilizers

Press the yellow button on the transmitter twice to get into *Stabilizer Mode*.

CAUTION

Avoid damage! Retract stabilizers before moving vehicle.

1 Raise the power down cylinder until the cylinder foot is just lifted off the ground.

2 Disengage the locking pin at the top of the cylinder. This will allow the power down cylinder to swing freely and to auto-rotate.

CAUTION

Avoid moving stabilizers! The unit has swing-up stabilizers that extend 7-feet (2.1 m) from each side of the unit. Stand clear.

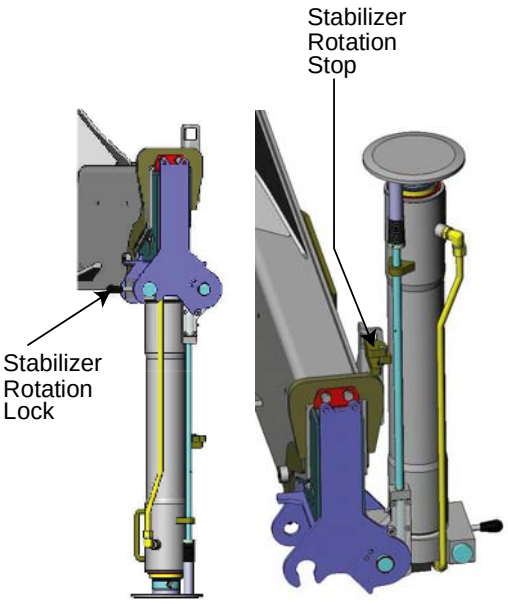
3 Continue to retract / raise the power down cylinder, *slowly*, until the cylinder is completely retracted and the stabilizer has rotated to contact the rotation stop.

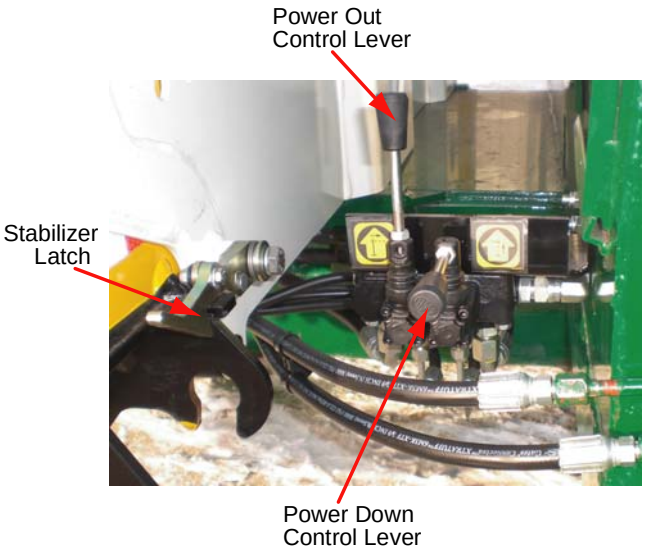
4 Retract the power-out stabilizer arm, using the Power Out control lever.

5 Verify the stabilizer arm is completely retracted and the stabilizer latch has slipped in place.

NOTE

Never retract / raise the power-down cylinder unless rotation lock is disengaged. If the pin is engaged when the stabilizer is retracted, you will damage the auto-rotate mechanism.





Container Tarper

The container tarper operation is controlled using the radio remote. All loads must be tarped before they are transported. Cover the body with the tarp using the tarper control. Follow the tarper manual for tarper operation.

Hoist Operation Mode

Use *Hoist* mode to dump or remove roll-off.

Hoist Mode - Dumping

1 Turn off the crane power (*Crane Mode* switch) on the power tower in the cab. The green light will go off.

CAUTION

Avoid equipment damage! Never move container backward or forward on hoist with wiring and hydraulic hoses connected.

2 Open the door at the back of the container, and lock it in the open position.

3 Dump the container per the instructions in the hoist manual.

Hoist Mode - Container Removal

1 Turn off the crane power (*Crane Mode* switch) on the power tower in the cab. The green light will go off.

2 Disengage PTO or crankshaft-driven pump.

3 Disconnect wiring and hoses in proper order.

a) Electrical Cable

b) Small coupling (pressure)

c) Large coupling (return)

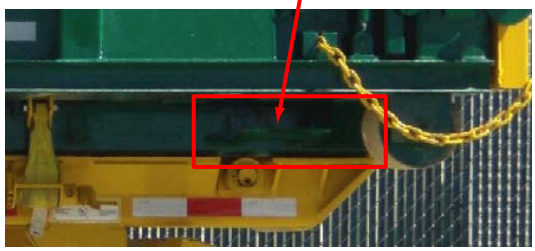

Electrical wiring connector

Ratchet strap

Hydraulic hoses

4 Avoid equipment damage! Cap each end of the hydraulic hoses and wiring harness when disconnected. Uncapped hoses and wires may get wet or damaged. Stow the green electrical cable in the stow pocket once unhooked to keep it clean. Stow the hoses in the hose storage tray above the ratchet strap.


Stored position for green electrical cable


Hose storage tray

5 Disconnect the ratchet straps.

6 Engage the PTO or crankshaft-driven pump.

7 Remove the container, using the guidelines in the hoist manual.

Transport Mode

Before moving the vehicle to a different location:

1 Stow the crane. Retract and stow the crane stabilizers.

2 Disengage the PTO or crankshaft-driven pump.

CAUTION

Disengage PTO or crankshaft-driven pump before connecting or disconnecting wires and hoses.

3 Turn off the crane power using the *Crane Mode* switch on the power tower in the cab.

4 Make sure the electrical wiring and hydraulic hoses are connected before moving the vehicle. If disconnected, be sure to connect in the proper order:

a) Large coupling (return

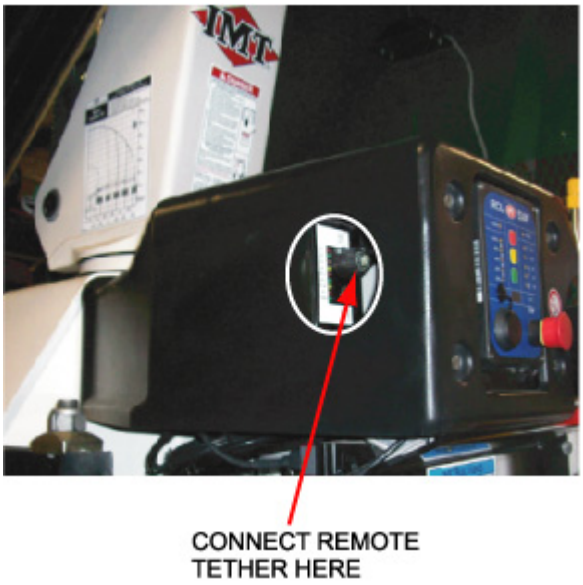
b) Small coupling (pressure)

c) Electrical cable

5 Turn off any job site safety lights, including truck hazard lights and strobe lights, if applicable, before driving the vehicle. Follow all transport safety regulations.

Tethered Remote

In case of radio failure, your crane is equipped with a cable for tethered remote operation. Connect the tether to the fitting inside the RCL box as shown, and to the tethered cable connector on the radio remote.

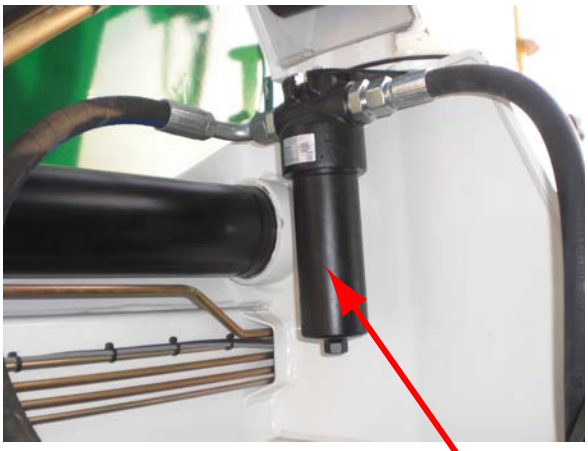


Refuse Container with Loader Maintenance Tasks

Inspections

Complete daily, weekly, monthly, and periodic inspections as noted in the General Reference section of the Material Handling Crane Operation & Safety manual, IMT # 99904591.

High-Pressure Filter

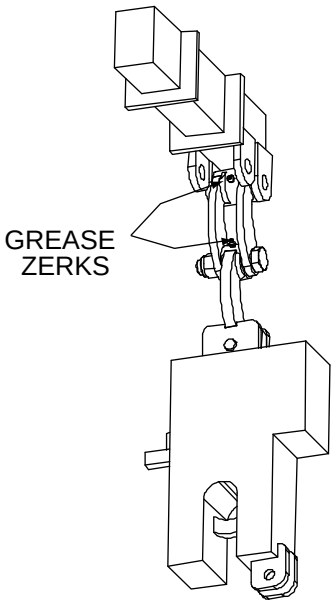


The filter should be changed annually or more frequently if needed. Replacement parts for the high-pressure filter include:

- Filter element - 49402
- Seal kit - 49417

Boom Tip Grease Zerks

Most of the grease and lubrication requirements for the Refuse Container with Loader are listed in the maintenance section of the crane manual, Material Handling Crane Operation & Safety , IMT # 99904591. The Refuse Container with Loader has two additional grease zerks which are not part of the crane, located near the rig release hook as shown. Grease, using Shell Alvania 2EP, Shell Retinax "A", Mobilith AW2 or equivalent, every six months.



Troubleshooting

Condition	Possible Cause	Solution
Crane will not work	PTO / crankshaft-driven pump is not activated.	Activate PTO or crankshaft-driven pump.
	Electrical harness and hydraulic hoses are not connected.	Connect electrical harness at the front of the container, and the hydraulic hoses at the rear of the body. (Deactivate PTO / crankshaft-driven pump before connecting!)
	Crane Mode switch on power tower in cab is not turned on.	Turn on *Crane Mode* switch.
	RCL safety system is not on.	Make sure all emergency stop buttons on the remote and RCL are released. Start the RCL by turning on the remote and pressing the green button.
	Crane Power toggle near manual control levers is flipped down (off).	Flip up (on) the *Crane Power* toggle.
Crane and roll-off container lean or tilt unexpectedly during rotation.	Clamps pins are not fully engaged.	Check both sides of the vehicle for clamp pin engagement. Reposition the vehicle so it is more level if the clamp pins are only closed on one side.
	Stabilizers are not fully deployed.	Deploy stabilizers.
Clamp pins are not engaged.	*Crane Mode* switch on power tower in cab is not turned on.	Turn on *Crane Mode* switch.
	Pneumatic failure	Test pneumatic function using the override button for the solenoid in the control panel.

Condition	Possible Cause	Solution
Hoist will not work.	Clamp pins are closed.	Open pins by turning off crane power (*Crane Mode* switch) in the cab.
Rig release will not work.	Wiring failure	Check wire connections at top of rig release.
		Lower load to ground. Use manual release button.
Vehicle moves very slowly.	Dash-mounted warning light is lit.	Check that the hoist is lowered completely.