

Lenny Mini Crane Arm

User Manual

Operational Instructions & Specifications

Lenny Mini Crane Arm

User Manual

Operational Instructions & Specifications

Edition 30



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The Operator should be qualified to operate equipment as expressed in this manual.

For assistance please call our 24-hour Customer Service.

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Safety Features

Lenny Mini Crane Arm

If any part of this manual is faxed or transmitted to a client, this page of warnings MUST be attached.

It is not permitted and is unlawful to operate this equipment within 10 feet of **High-Voltage Lines** of 50,000 volts or less. For minimum clearance of **High-Voltage Lines** in excess of 50,000 volts, see California Code of Regulations, Title 8, Article 37, High-Voltage Electrical Safety Orders. Keep the crane arm **balancing at all times**. Avoid sudden desembarking of personnel or removing equipment.

When attaching the Bucket Section to the Lenny Mini, be sure that the Quick Release Pin is fully seated. Then hand tighten the large knobs in the Weight Bucket to eliminate any looseness in the connection between the Weight Bucket and the arm. Tighten all the knobs equally.

The stated **maximum height will vary** according to the Base chosen. All weights and heights are based on scale accuracy of 2%. For configurations not shown in this manual, or **questions**

regarding a special setup, please contact a Chapman/Leonard Service Representative. The Lenny Arm Bucket Positioning Bolts are for aligning and mounting an EMPTY Bucket to the rear of a Lenny Arm. As soon as a Bucket is connected to a Lenny Arm with the Positioning Bolts, the two Retaining Rods MUST be inserted

and Knurled Nuts tightened on the Retaining Bolts.

Never exceed the **maximum payload values** for any configuration. Chapman/Leonard Studio Equipment, Inc. will **NOT** guarantee the safety or performance of any alterations to the depicted arm configurations.

DO NOT exceed the listed Post Mount Height (PMH) values to avoid invalidating our safety recommendations.

The Lenny Arm rear section combination should be configured so that the **bucket touches the ground** before the Lenny Arm vertical travel limits are obtained.

The Lenny Mini is for **Remote Use ONLY!** Never attempt to use as a Man Set-Up.

Warnings

Please **DO NOT** do the following:

DO NOT exceed the total weight capacity of the CS Base.

DO NOT use the tires on the CS Base as a step. The tires will turn easily if the base is raised up on the Jackscrews.

DO NOT use the Riser in any Manned Configurations. The Riser is for Unmanned or Remote Configurations only.

DO NOT mix tire types. All tires on the CS Base must be of the same type.

The following are recommended uses of the CS Base:

DO place the CS Base on firm ground or provide further support by adding plywood sheeting or other means.

DO keep any unused Weights in the Storage Areas of the CS Base. This adds to the balance and stability of the CS Base.

DO wear gloves when handling Weights.

DO use the Pneumatic Tires as a Safety Feature when the CS Base is used on track.

DO insure the Weight Bucket is able to touch the ground when an Arm is attached to the CS Base.

The Cable System **MUST** be used on any Arm attached to the CS Base if the Auxiliary Weight Bucket is used on the Arm.

WARNING!

It is NOT Permitted and is Unlawful to Operate this Equipment within 10 feet of High-Voltage Line of 50,000 Volts or Less.

For Minimum Clearances of High-Voltage Line in excess of 50,000 Volts, see California Code of Regulations, Title 8, Article 37, High-Voltage Electrical Safety Orders.

Source Title 8, California Code of Regulations, Subchapter 5, Group 2, Article 37, §2946, 29 Code of Federal Regulations 1926,451 (F)(6)

Nominal Voltage	Minimum Required (Feet)	Clearance (Meters)
600 up to 50,000	10	3
Over 50,000 to 75,000	11	3.4
Over 75,000 to 125,000	13	4
Over 125,000 to 175,000	15	4.6
Over 175,000 to 250,000	17	4.6
Over 250,000 to 370,000	21	6.4
Over 370,000 to 550,000	27	8.2
Over 550,000 to 1,000,000	42	12.8

Lenny Mini Crane Arm

Parts & Accessories

All weights are based on scale accuracy of 2%

Center Post 90.5 lb (41.1 kg)

A: 15.5" (.39 m) Note: Length is 25" B: 19.3" (.49 m) (.64 m) including C: 24" (.61 m) leveling rod ends

Nose Segment + Camera Plate 43.5 lb (19.7 kg)

A: 9.8" (.25 m) B: 19.5" (.5 m) C: 24.5" (.62 m)

D: 5" (.13 m) end to bearing

Bucket Segment 17.5 lb (7.9 kg)

A: 8" (.2 m)

B: 5" (.13 m) end to bearing

1 ft (.3 m) Rear or Front Section 21 lb (9.5 kg)

Length is 14" (.36 m) including leveling rod ends and insert pins. (Insert pins are on right side).

2 ft (.61 m) Front Section 30 lb (13.6 kg)

Length is 26" (.66 m) including leveling rod ends and insert pins. (Insert pins are on left side).

Nose Segment + Camera Plate 43.5 lb (19.7 kg)

A: 9.8" (.25 m) B: 29" (.74 m)

C: 28.5" (.72 m)

D: 5" (.13 m) end to bearing













2 ft (.61 m) Rear Section 30 lb (13.6 kg) Length is 26" (.66 m) including leveling roo

Length is 26" (.66 m) including leveling rod ends and insert pins. (Insert pins are on left side).

2 ft (.61 m) Reversible Section 30.5 lb (13.6 kg) Length is 26" (.66 m) including leveling rod ends and insert pins.

Small Bucket 39.5 lb (17.9 kg)

A: 25" (.64 m) B: 7.5" (.19 m)

Split Bucket 67 lb (30.5 kg)

Total Capacity: 44 Weights - 1,210 lb (550 kg)

A: 29.5" (.75 m) B: 14" (.36 m)

Cable System 34.5 lb (15 kg) - 43 lb (19 kg)

Weight 27.5 lb (12.5 kg)











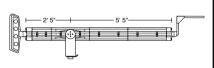
Terms & Definitions

- MH Maximum Height (From lens to ground in underslung mode. Additional height may be achieved by inverting remote head.)
- MR Maximum Reach (As measured from center post to ideal camera position).
- MP Maximum Payload.
- **BW** Bucket Weight for Balanced Arm (No Payload).
- BAW Balanced Arm Weight (No Payload).
- MOW Maximum Operational Weight of unit. (With 135 lb Payload).
- ROW Remote Operational Weight of unit. (With maximum payload and a full weight bucket).

- BR Balance Ratio (Determines the amount of weight required in bucket to balance a given payload after arm itself has been balanced).
- PMH Post Mount Height needed to obtain maximum height on level ground. (Not to be exceeded).
- UW Unit Weight.
- IMD Ideal Camera Mount Distance (From the Bearing to the Camera Mount).
- BAW + (BR + 1) Nose Load
 Operating Weight for any given nose lead.

- ** PeeWee, Hybrid & Hustler hydraullic arm use is possible with a 50 lb maximum load.
- *** Hybrid & Hustler hydraulic arm use is possible with a 50 lb maximum load.

Diagram lengths are measured from bearing to bearing. All diagrams are drawn to scale.



Components

Lenny Mini Crane Arm



User Guide #0261



Weight Cart #0400



Lenny Mini Cart #0430



1/4 Weight (6 ^{7/8} lb) #3148



1/2 Weight (13 ^{3/4} lb) #3150



Weight (27 1/2 lb) #3151



Strut #4696



Safety Cap & 2" Bolt #4415







Center Post Cable Bracket #5121



Front Cables #5123



Rear Cables #5125



Cable Carrying Case #5129



Bucket Quick Release Pin #5289



Center Post #5345

2 Foot Cables

#5124



Front Nose Section #5346



Rear Bucket Section #5347



Split Bucket #5352



2 Foot Front Section #5348



1 Foot Section Front & Rear #5355



2 Foot Rear Section #5350



2 Foot Reversible Section #5358



Small Bucket #5351



Underslung Nose #5362



Front Cable Bracket #5428



8 Foot Cable #5435



Rear Cable Bracket #5429



Turnbuckle 1/2" x 12" #5437



1 Foot Cables Rear #5430



Overslung Nose #5455



Blue Center Cables #5432 - 5436



2x Quick Release Pins #9077 & 9078

Assembly Procedure

Lenny Mini Crane Arm



The Lenny Mini® is among the smallest of Chapman's array of crane arms.

The Lenny Mini® is the arm of choice for scenes requiring: easy assembly, lightweight setups, ample reach, height and rigidity.

The complete Lenny Mini® can be stored within its Accessory Cart.

Always lock the wheels when the cart is parked.



The Lenny Mini® is small enough to be mounted on a variety of dollies and pedestals.

The Pedolly pedestal is ideal for use with the Lenny Mini®.

Assembly of the Lenny Mini® begins with assuring that the wheels of the dolly or base are either locked or chocked.



The Lenny Mini® can be easily assembled by one person. Begin by placing the Center Post on top of the pedestal or dolly Post Kit.



The Castle Ring secures the Center Post to the base of your choice.



Tighten the Castle Ring with a bar. Moderate torque is sufficient to achieve the correct tightness.



The Safety Cap and Bolt is installed over the Castle Ring. This will prevent the Castle Ring from coming loose in any situation.

Warning!

Always use The Safety Cap.



Tighten the Safety Cap and Bolt with a wrench (provided with accessories).



The Lenny Mini® arm sections fit together with two tapered pins. Position the tapered pins of one arm section into the holes of another arm section.



Hand tighten the bolts prior to wrench tightening. A support may be used to aid in the assembly procedure.

Note:

Each section of the Lenny Arm is numbered. Every Lenny Arm is assembled at the factory in numerical order. Assembling a Lenny Arm is quick and easy if it is built in the correct numerical sequence.



A 1 1/2" socket wrench is included with every Lenny Mini®.



Tighten the upper Bolt with the wrench.



Tighten the lower Bolt with the wrench.

Note:

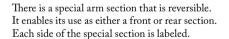
Correct positioning of the support is an important part of building the arm.

Assembly Procedure

Reversible Section







To change the Reversible section from a front section to a rear section, the linkage must be moved from one side of the arm section to the other.



Lay the Reversible section on a flat surface. Extract the two Quick Release Pins that secure the linkage to the arm section. Begin by pressing on the two Quick Release Pins at the same time and pull away from the arm section.



It is not necessary to completely remove the Quick Release Pins from the linkage. There is a washer and spacer on each Quick Release Pin.



Flip the Reversible section over.



Reattach the linkage to the Reversible section.

The male end of the linkage.

Insertion Pin of the Reversible section.



The male end of the linkage should be oriented to match up with Insertion Pins of the Reversible section.



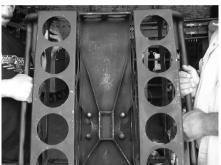
The Reversible section is now ready to attach to the Arm.

Weight Bucket

Assembly



The Rear Segment has a large Quick Release Pin for attaching the Weight Bucket. However, this is only part of the attachment procedure.



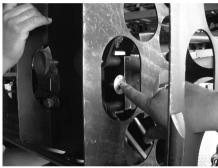
There is a slot inside the Weight Bucket for accepting the Rear Segment of the Arm.



Remove the large Quick Release Pin from the Rear Segment of the arm. Lift the Weight Bucket and line up the slot with the Rear Segment of the arm.



Insert the large Quick Release Pin; joining the Weight Bucket to the Rear Segment of the arm.



Be sure that the large Quick Release Pin is fully seated in the hole.



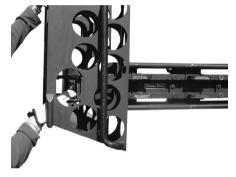
Hand tighten the two lower bolts in the rear center of the Weight Bucket.



Hand tighten the large knobs in the Weight Bucket to eliminate any looseness in the connection between the Weight Bucket and the arm. Try to equally tighten the two large knobs. Tighten the left Knob one turn.



Now tighten the right knob one turn. Go back to the left knob and tighten one turn.



Repeat until there is no play in the Weight Bucket.



At this point you can begin to load the Bucket with Weights as each additional forward section is added to the Arm.

Load the Weight Bucket evenly. Load only enough weight to counter balance the desired payload.



Always maintain a balanced Arm. A balanced Arm will safely remain in any position, or maintain a smooth constant motion. A balanced Arm makes for greater Arm control and safety.

When changing the Payload, be sure to counter balance with the correct amount of weight.

The Cable System

Setup



The Center Cable attaches to the upper part of the Weight Bucket.

Note:

The distance from the bottom of the Center Post Fulcrum to the Top of the Cable Bracket is 46 inches.



Leveling the Nose Plate begins with leveling the **Center Post of the Base**, and ends with checking **BOTH** Bubble Levels on the Nose Plate.

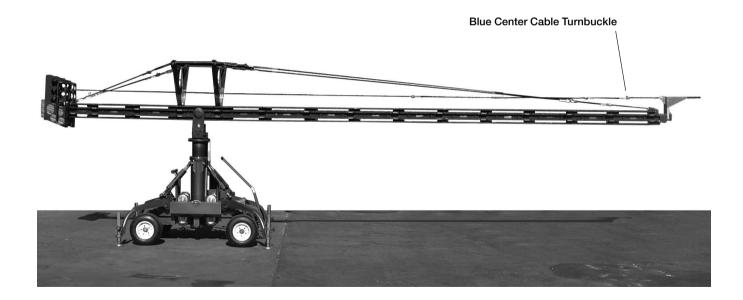


A level Nose Plate is achieved by adjusting the Center Cable Turnbuckle, **AFTER** the Center Post of the Base has been leveled.

An essential safety feature of the Lenny Mini® requires that the Weight Bucket be able to rest on the ground when the arm is raised to its maximum height.

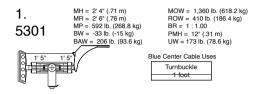
Regardless of the Configuration that you choose for the Lenny Mini®, the Blue Center Cable must **ALWAYS** be used. The Center Cable enhances the leveling integrity of the Nose Plate; acts as a safety feature of the Weight Bucket and adds greater rigidity to the arm.

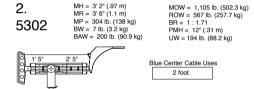


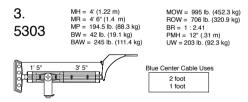


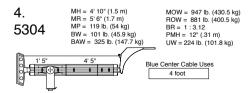
Configurations

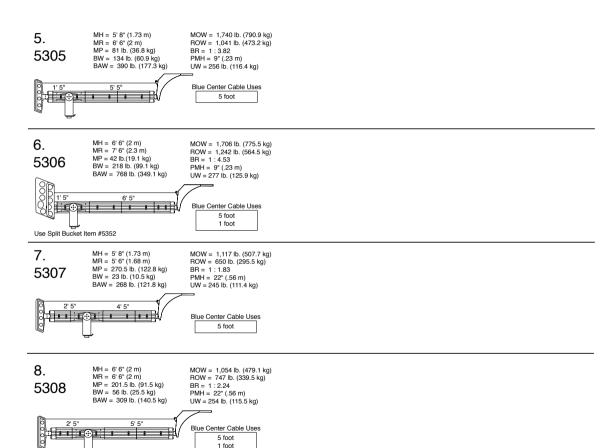
Lenny Mini®

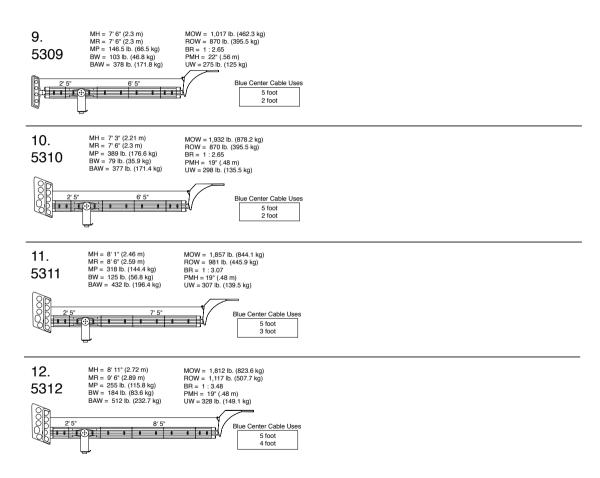


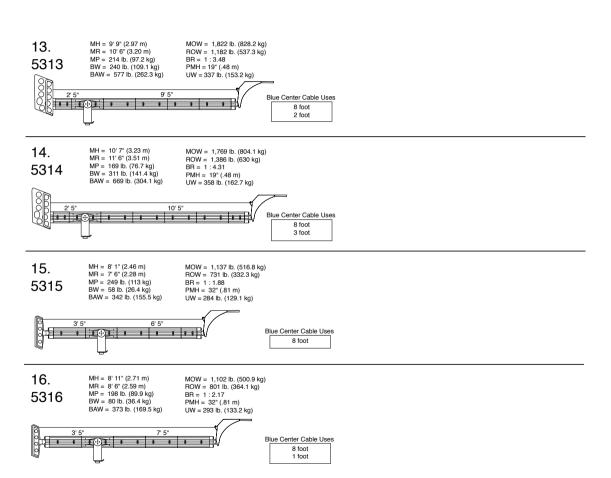


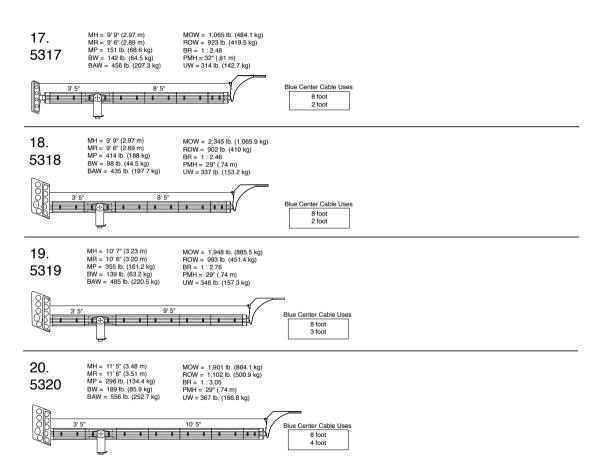


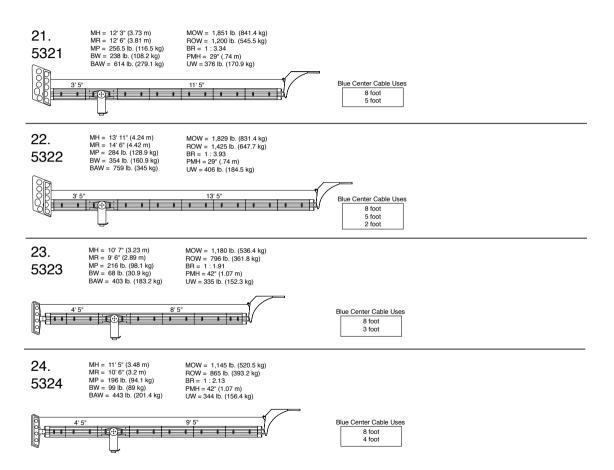


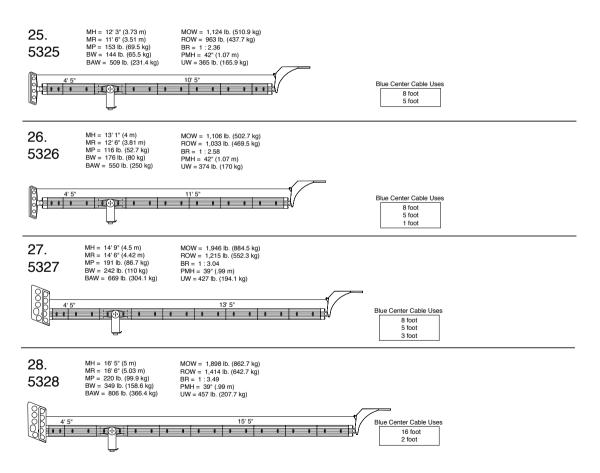


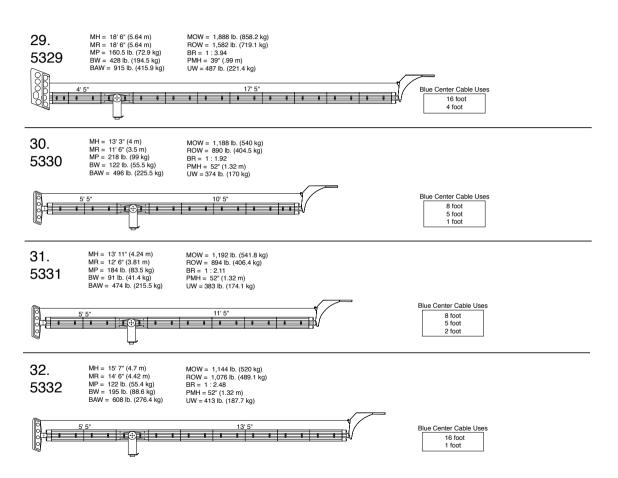


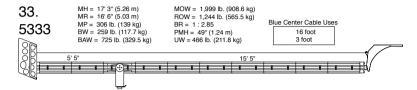


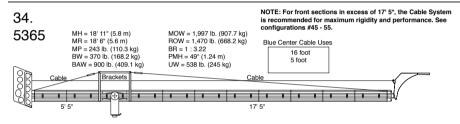




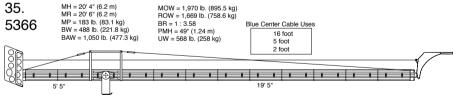






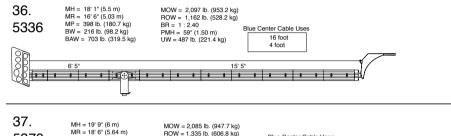


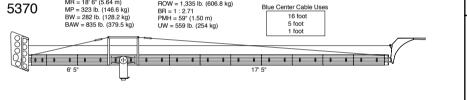
Rear 2 - 1/4" Yellow Cables 38" long Front 1 - 1/4" White Cable 14' 8" long 1 - 1/4" Red Cable 14' 8" long



Rear 2 - 1/4" Yellow Cables 38" long Front 1 - 1/4" White Cable 14' 8" long 1 - 1/4" Red Cable 14' 8" long 1 - 1/4" White Cable 2' long 1 - 1/4" Red Cable 2' long

Cables



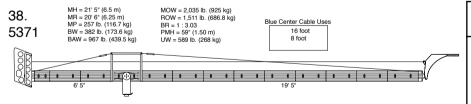


Rear

2 - 1/4" Yellow Cables 38" long 2 - 1/4" Yellow Cables 12" long

Front

1 - 1/4" White Cable 14' 8" long 1 - 1/4" Red Cable 14' 8" long



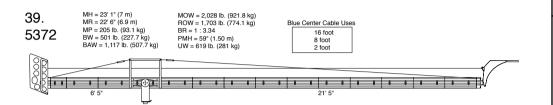
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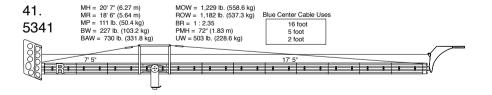
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Front

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40. MH = 18' 11" (5.77 m) MOW = 1,241 lb. (564.1 kg) MR = 16' 6" (5.03 m) ROW = 1,067 lb. (485 kg) Blue Center Cable Uses MP = 166 lb. (75.3 kg) 5340 BR = 1:2.08 BW = 179 lb. (81 kg) PMH = 72" (1.83 m) 16 foot BAW = 652 lb. (296.4 kg) 5 foot UW = 473 lb. (215 kg) 15' 5" ----



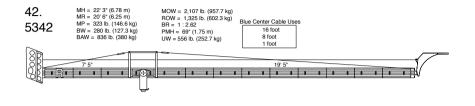
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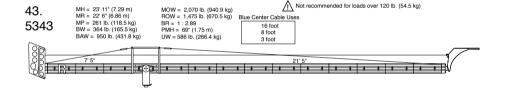
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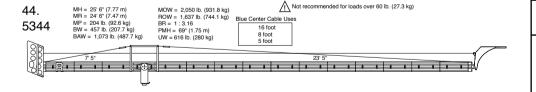
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2' long

1 - 1/4" Red Cable

Cables

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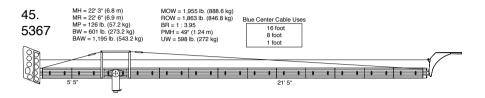
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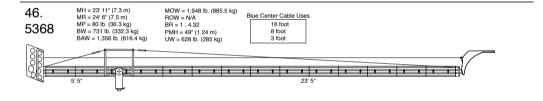
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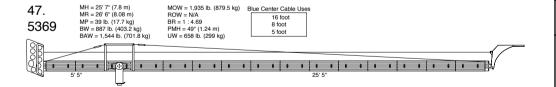
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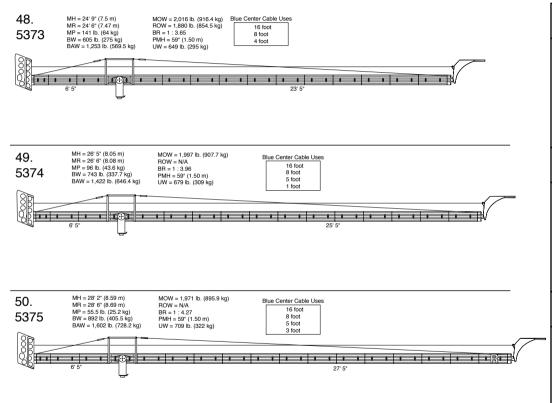
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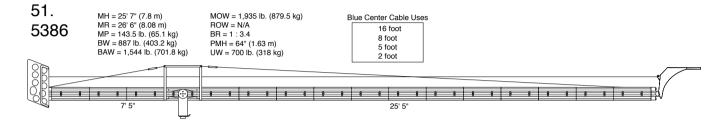
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Rear

- 2 1/4" Yellow Cables 38" long
- 2 1/4" Yellow Cables 2' long

Front

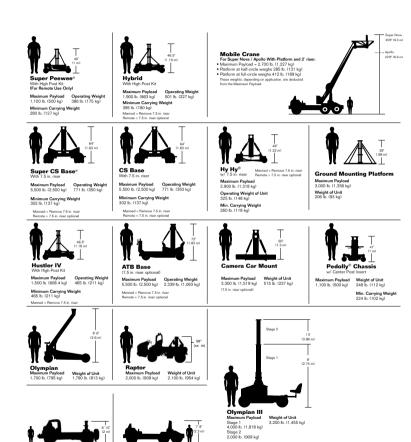
- 1 1/4" White Cable 14' 8" long
- 1 1/4" Red Cable
- 14' 8" long
- 4 1/4" White Cable
 - 011---
- 4 1/4" Red Cable
- 2' long 2' long

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Maverick

Maximum Payload 6,000 lb. (2,727 kg)

The Lenny Mini® can be mounted on the following Chapman/Leonard Products.



Super Maverick

Maximum Payload 8,000 lb. (3,629 kg)

Cable System

Checklist

Quantity	Item Description
2	15 ft Front Cable
10	2 ft Extension
7	Center Cable (Blue) 1', 2', 3', 4', 5'., 8' and 16'
2	38 in Rear Cable
2	10 in Rear Cable
23	Quick Release Pins, 3/8" x 1"
4	Quick Release Pins, 3/8" x 11/2"
4	Cable System Turnbuckle 1/2" x 6"
1	Cably System Turnbuckle 12" x 1/2" with 2 Bolts and Nuts 11/2" x 3/8
2	F/R Brackets
4	Nuts 3/8"
4	Washers 3/8"
2	Lenny Mini Center Post Brackets
4	1/2" x 3/8" Bolt (Bracket)
2	Center Post Spreaders
1	Carrying Case
1	Lenny Mini® User Guide

Warning!

The Lenny Arm rear section combination should be configured so that the bucket touches the ground before the Lenny Arm vertical travel limits are obtained

Shipping & Rental Return

The customer should be sure that the equipment is properly crated for shipment. Get a signed receipt from the shipping company that will be transporting the equipment. Keep the receipt from the transport company indicating that the equipment has been shipped to Chapman/Leonard Studio Equipment, Inc.

When picking up or returning rental gear to Chapman/Leonard Studio Equipment, Inc., please remember that rentals are due back by 10 a.m. at our North Hollywood facility.

The rental bays are located on your left, immediately after entering the facility from Raymer Street. Trucks should be backed up to the bays for easier loading. If no bays are available, you can temporarily park on Raymer Street and advise the Rental Office of your arrival. A Customer Service Agent will advise you when a spot opens at the bay.

All drivers should first report to the Rental Staff for paperwork. Unloading will not begin until the paperwork has been picked up and stamped. Our Rental Staff is well trained to process equipment and documents quickly and courteously. It is our intent to get you back on the road in a timely manner.

Address

Chapman/Leonard Studio Equipment, Inc. 12950 Raymer Street North Hollywood. CA 91605

Rental Office Hours

Monday - Friday Saturdays 7am - 6pm 8am - 12 pm

