

LPI INCORPORATED

THE RECOGNIZED INDUSTRY LEADER OF
PERSONNEL LIFTS AND WORK PLATFORMS

Standard & Custom Designed MULTI-AXIS MAST LIFTS



Paint Finishing (left)

Manufacturing (bottom)

Maintenance

Material Handling

Hazardous Location

STANDARD 3 AXIS

EXTENDED REACH
Y AXIS

4TH AXIS
INSIDE DESCENT

LIFT OPTIONS

3 AXIS BLAST



LPI[®]

LIFT SYSTEMS

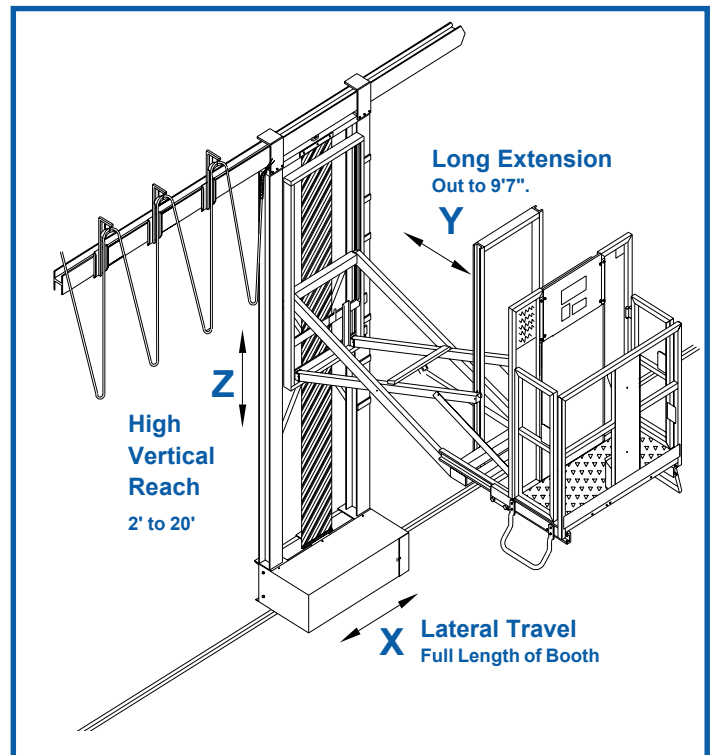
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MULTI-AXIS MAST LIFTS

3-AXIS BALLSCREW SYSTEM



- Pneumatic power source makes lift safe for use in heavy paint applications and other hazardous locations. Unit requires 100 PSI at 80 SCFM.
- Operator controls are located in the front of the platform allowing the operator to concentrate on the task at hand.
- Operator platform is 21" deep x 48" wide with a capacity of 500#.
- Unit is designed for high production and low maintenance with self-lube bushings and a minimum amount of grease points.
- Equipped with in-line filter/regulator/lubricator with moisture separator to ensure long life of all pneumatic components.
- Standard uncoiled auxiliary air supply in operator platform for accessories.
- Custom product conversion available upon request.



X-Axis

- Entire lift travels on two aluminum wheels which ride on a floor mounted rail and is also guided by cam followers on a wall mounted I-Beam upper rail.
- Upper rail serves as a support for a roller trolley festoon system.
- Rate of travel is variable up to over 40 FPM and is controlled with a variable flow foot valve for hands-free operation.

Y-Axis

- Operator platform extends and retracts horizontally a distance of approximately 79".
- Horizontal travel is approximately 15 FPM.
- Driven by a sealed linear actuator which can be quickly replaced for ease of maintenance and minimal down time.

Z-Axis

- Lowered platform height is approximately 2'. Raised platform height is available up to 20' depending on desired height and intended installation area.
- Rate of vertical travel is approximately 15 FPM.
- Z-Axis driveline is a positive displacement system using a rotary ballscrew driven through a self-locking worm drive gear reducer for safety and precise control.
- Equipped with two independent safety systems to prevent uncontrolled descent in the unlikely event of an interruption in air supply or mechanical driveline failure.
- Equipped with E-down system to allow the platform to be lowered by the operator if air supply is lost.
- Can be raised and lowered from the ground controls for maintenance or if the operator should become disabled.

MULTI-AXIS MAST LIFTS

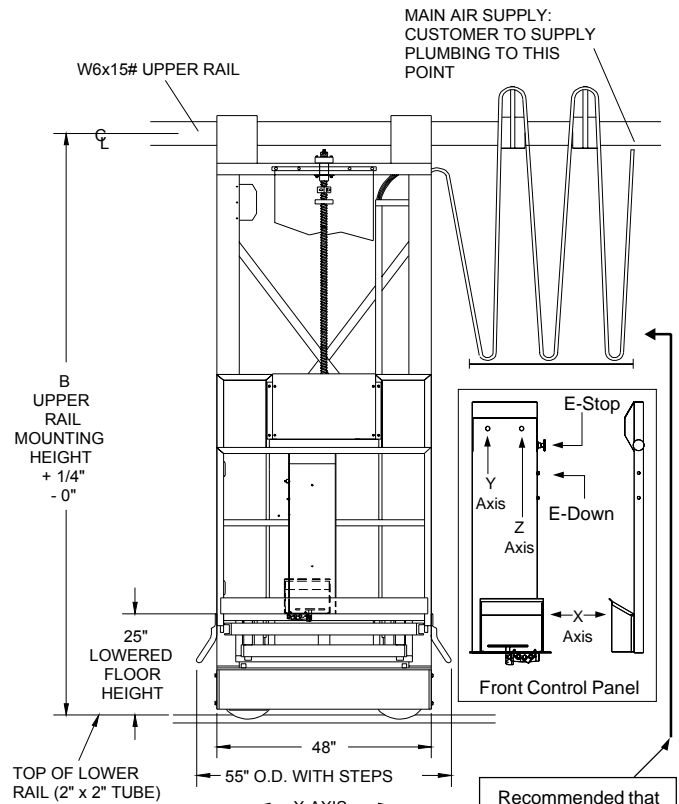
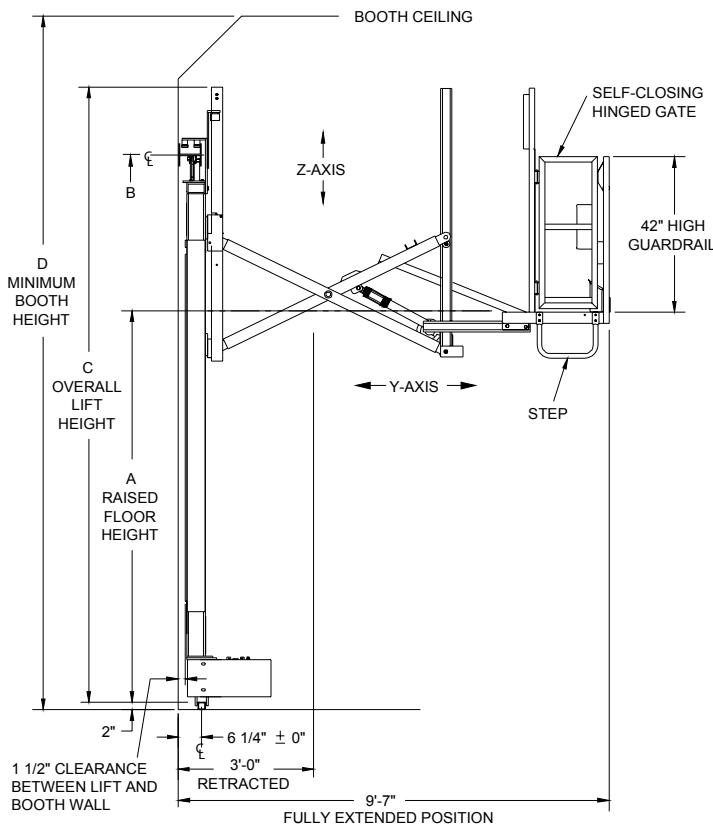
PRODUCT SPECIFICATIONS

SPACE REQUIRED FOR FESTOONING SYSTEM IN STORED POSITION

Booth Length	Storage Space	Approx. # Carriers
0-50 Ft.	3 Ft.	4
50-80 Ft.	4 Ft.	6
80-120 Ft.	6 Ft.	9

If booth does not have enough length to allow access to ends of product, consult factory for options.

Standard ambient operating temperature range 60° F to 120° F. For non-standard temperature ranges, consult factory for design options.



Made in USA

Recommended that festooning hose be kept a minimum of 7' above floor level.

STANDARD MODEL	A	B	C	D
LP2-810	8'-0"	11'-3"	13'-3"	15'-0"
LP2-910	9'-0"	12'-3"	14'-3"	16'-0"
LP2-1010	10'-0"	13'-3"	15'-3"	17'-0"
LP2-1110	11'-0"	14'-3"	16'-3"	18'-0"
LP2-1210	12'-0"	15'-3"	17'-3"	19'-0"
LP2-1310	13'-0"	16'-3"	18'-3"	20'-0"
LP2-1410	14'-0"	17'-3"	19'-3"	21'-0"
LP2-1510	15'-0"	18'-3"	20'-3"	22'-0"
LP2-1610	16'-0"	19'-3"	21'-3"	23'-0"
LP2-1710	17'-0"	20'-3"	22'-3"	24'-0"
LP2-1810	18'-0"	21'-3"	23'-3"	25'-0"
LP2-1910	19'-0"	22'-3"	24'-3"	26'-0"
LP2-2010	20'-0"	23'-3"	25'-3"	27'-0"

Dimensions are from top of lower rail.

INSTALLATION KIT (1 Required Per Lift)

Part Number: use LP2 [booth length] [booth height] with suffix IK

(i.e. LP26020-1K)

Change prefix LP2 to LP4 for 4th Axis Inside Descent Lift.

Kit includes:

- Upper and lower rails for mounting lift to booth walls with lower rail stops, and all mounting hardware.
- Festooning system with trolleys, main air supply hose and hose support grip. System is capable of carrying 2 additional lines, supplied by customer, up to 3/4" I.D. for breathing air and paint line or auxiliary air line for paint equipment.

OPTIONAL:

OPTION	P/N	OPTION	P/N
Upper Rail Spacer Kits	201-0974	5 Gallon paint pot kit	201-2350
4x4 Overspray cover	201-1024	Lower rail scraper kit	201-2251
Lower rail guides	201-0074	Front gate	Consult Factory
Auxiliary flex track	201-0075	Receiver Steps	Left Side: 201-2256
Safety contact bumper system	202-0268-03 Right Side: 201-2255	

SEE PAGE 17 FOR OPTION DESCRIPTION

Note: Model selected should not exceed the inside height of booth. For calculation take the raised floor height (Dimension A) of the lift plus an additional 7' for personnel.

• All models meet applicable OSHA/ANSI Standards as interpreted by LPI, Inc. •

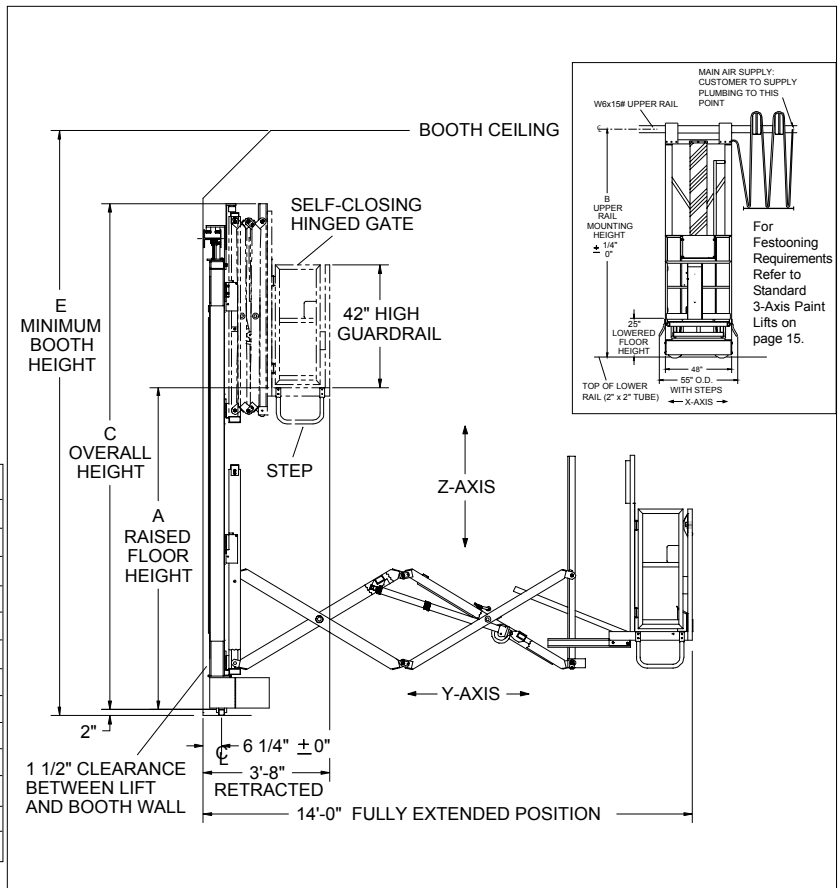
MULTI-AXIS MAST LIFTS

EXTENDED REACH Y-AXIS

- Units are equipped with a double scissor mechanism to provide up to 10 ft. 4 in. of travel for a maximum 14 ft. reach from booth wall. Retracted dimension is 3'-8" from booth wall.
- Operator platform is 21" deep x 48" wide with a capacity of 300#.
- Allows one operator to paint entire end of product.

STANDARD MODEL	A	B	C	D	E	F
LP2-814	8'-0"	12'-3"	13'-3"	16'-3"	15'-0"	17'-0"
LP2-914	9'-0"	13'-3"	14'-3"	17'-3"	16'-0"	18'-0"
LP2-104	10'-0"	14'-3"	15'-3"	18'-3"	17'-0"	19'-0"
LP2-1114	11'-0"	15'-3"	16'-3"	19'-3"	18'-0"	20'-0"
LP2-1214	12'-0"	16'-3"	17'-3"	20'-3"	19'-0"	21'-0"
LP2-1314	13'-0"	17'-3"	18'-3"	21'-3"	20'-0"	22'-0"
LP2-1414	14'-0"	18'-3"	19'-3"	22'-3"	21'-0"	23'-0"
LP2-1514	15'-0"	19'-3"	20'-3"	23'-3"	22'-0"	24'-0"
LP2-1614*	16'-0"	20'-3"	21'-3"	24'-3"	23'-0"	25'-0"
LP2-1714*	17'-0"	21'-3"	22'-3"	25'-3"	24'-0"	26'-0"
LP2-1814*	18'-0"	22'-3"	23'-3"	26'-3"	25'-0"	27'-0"
LP2-1914*	19'-0"	23'-3"	24'-3"	27'-3"	26'-0"	28'-0"
LP2-2014*	20'-0"	24'-3"	25'-3"	28'-3"	27'-0"	29'-0"

Dimensions are from top of lower rail.
 Change prefix LP2 to LP4 for 4th Axis Inside Descent Lift.
 *All Extended Reach models over 16 ft. and all 4th Axis models have a 6' 8" base.

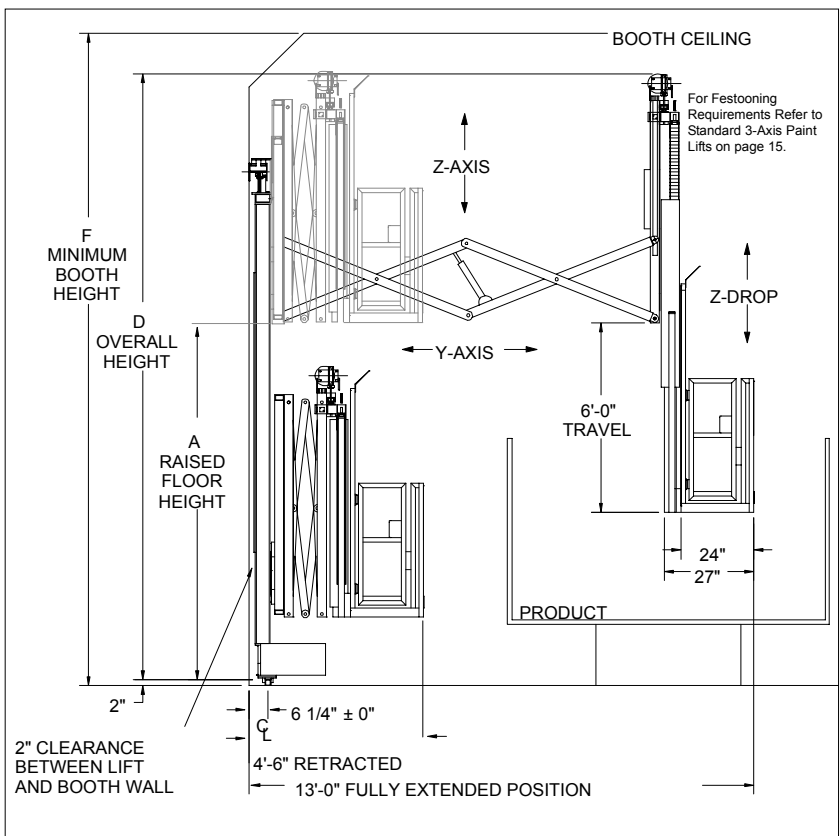


4TH AXIS INSIDE DESCENT

- This configuration allows for convenient painting of the inside of large products such as truck dump bodies or railroad cars.
- 4th axis movement is controlled by a rotary ballscrew and provides travel speeds of approximately 15 FPM.
- Equipped with same control and safety features as standard LP2 lifts.

See page 15 for Installation Kit Numbers.
 See Page 17 for Option Numbers & Descriptions.

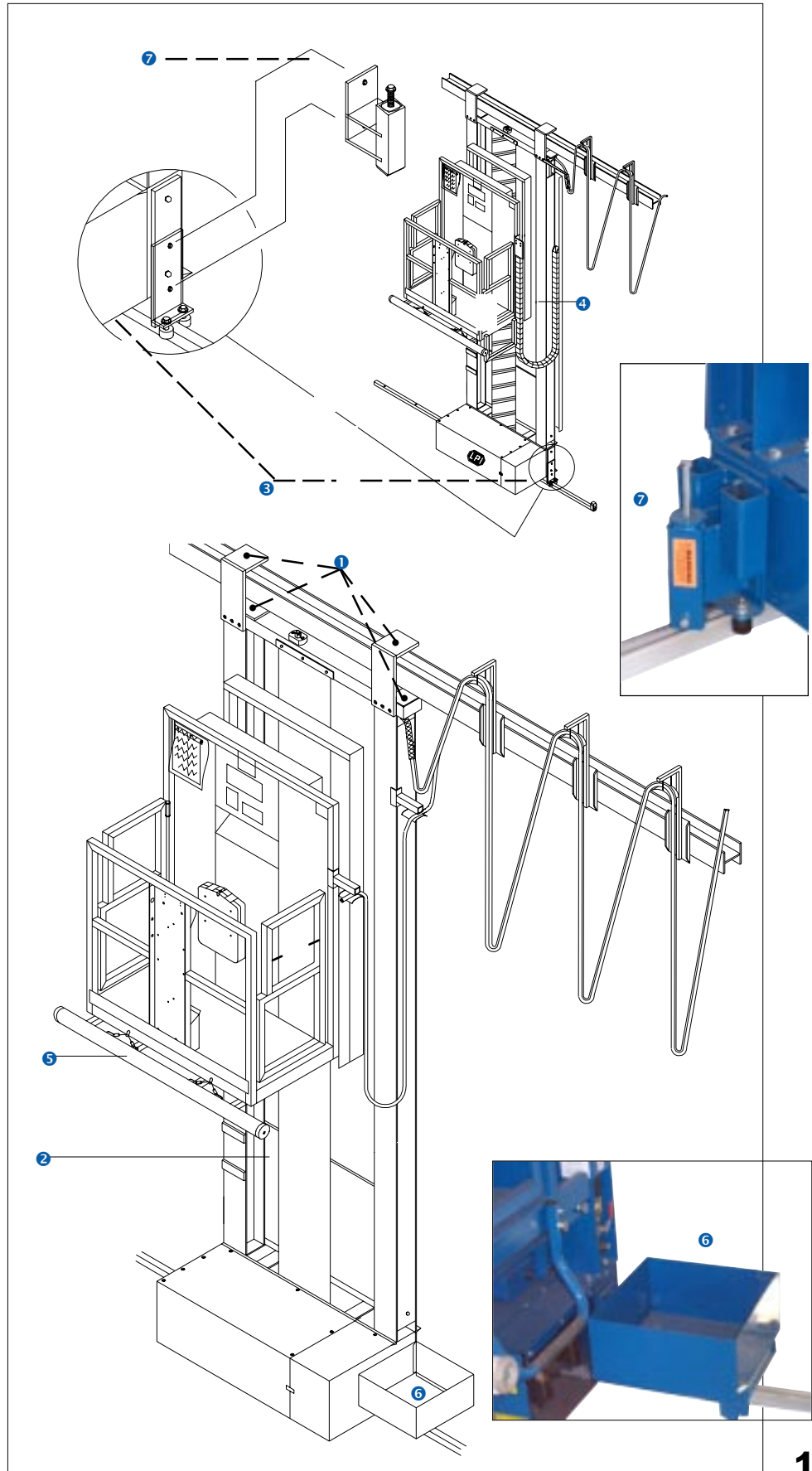
Note: Model selected should not exceed the inside height of booth. For calculation take the raised floor height (Dimension A) of the lift plus an additional 7' for personnel.
 • All models meet applicable OSHA/ANSI Standards as interpreted by LPI, Inc. •



MULTI-AXIS MAST LIFTS

LIFT OPTIONS

- ❶ **Upper Rail Spacer Kits** Used to move lift out from the booth wall to provide clearance between mast and wall. Kits available with additional 4", 8" or 12" clearance. To specify kit, add 4, 8 or 12 after part number.....P/N 201-0974
- ❷ **4'x4' Overspray Cover:** Used to prevent overspray from being pulled through vertical drive mechanism on side draft booths P/N 201-1024
- ❸ **Lower Rail Guides** (2 required per lift): Used when high solids paints are used causing build-up on lower rail. Increase lateral travel speeds and power. P/N 201-0074
- ❹ **Auxiliary Flex Track** with 1"x4" I.D. to carry breathing air and paint line from festooning system to basket. To specify add lift height after part number P/N 201-0075
- ❺ **Safety Contact Bumper System:** Will shut down all lift motion if basket comes in contact with an obstruction. (The operator then can override the system to move away from obstruction.) P/N 202-0268-03
- ❻ **5-Gal. Paint Pot Kit:** Lift can be adapted to carry one 5-gal. paint pot. Carrier overall dimension is 16"x16" which attaches to base of lift making overall length of base 6'. Also included in kit is a paint gun holder mounted in basket capable of holding two paint guns. Two hose holders are used, one attached to mast column and one to basket rail, to run paint lines to/from paint pot to basket. All paint equipment supplied by customer. P/N 201-2350
- ❼ **Lower Rail Scraper Kit:** Cleans excess overspray off lower rail when paint buildup is a problem. (1 required) P/N 201-2251
- ❽ **Structural Kit:** Additional support for booth enclosure Consult Factory
- **Front Gate:** (not shown)Consult Factory
- **Receiver Steps:** Required when standard steps interfere with access over product. (required with Safety Contact Bumper option)
 Left side P/N 201-2256
 Right side P/N 201-2255



MULTI-AXIS MAST LIFTS

3 AXIS BLAST LIFT

FEATURES SEALED BEARINGS
AND SELF-LUBING BUSHINGS FOR
LONG LIFE, LOW MAINTENANCE



- Pneumatic power source. Unit requires 100 PSI at 80 SCFM.
- Sealed vertical driveline has been proven effective in harsh blast room environments.
- Operator controls are located in the front of the platform allowing the operator to concentrate on the task at hand.
- Operator platform is 30" deep x 48" wide with a capacity of 300#.
- Unit is designed for high production and low maintenance with self-lube bushings and a minimum amount of grease points.
- Equipped with in-line filter/regulator/lubricator with moisture separator to ensure long life of all pneumatic components.
- Operator platform is designed to support and transport the blast media hose. The lift provides power to transport the blast hose, thereby reducing effort and fatigue for the blast operator.

X-Axis

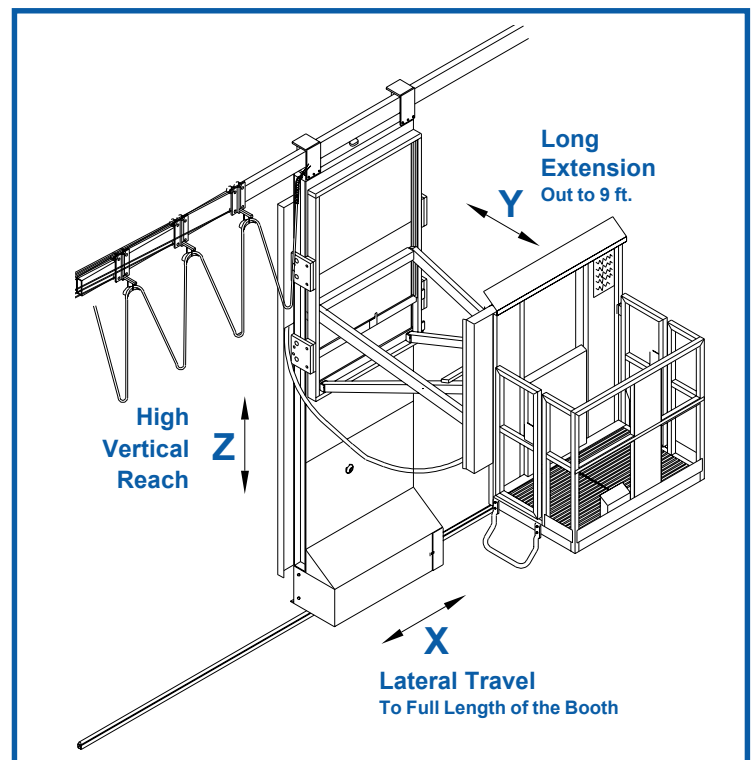
- Entire lift travels on two steel V-wheels which ride on a floor mounted rail and is also guided by cam followers on a wall mounted upper rail. Both rails are designed to shed blast media.
- Upper rail serves as a support for a roller trolley festoon system.
- Rate of travel is variable up to over 40 FPM and is controlled with a variable flow foot valve for hands-free operation.

Y-Axis

- Operator platform extends and retracts horizontally a distance of approximately 60".
- Horizontal travel is approximately 15 FPM.
- Driven by a sealed linear actuator which can be quickly replaced for ease of maintenance and minimal down time.

Z-Axis

- Lowered platform height is approximately 20". Raised platform height is available up to 20' depending on desired height and intended installation area.
- Rate of vertical travel is approximately 30 FPM.
- Z-Axis driveline is a positive displacement counterweighted ballscrew/cable system for safety and precise control.
- Equipped with two independent safety systems to prevent uncontrolled descent in the unlikely event of an interruption in air supply or mechanical driveline failure.
- Equipped with E-down system to allow the platform to be lowered by the operator if air supply is lost.
- Can be raised and lowered from the ground controls for maintenance or if the operator should become disabled.



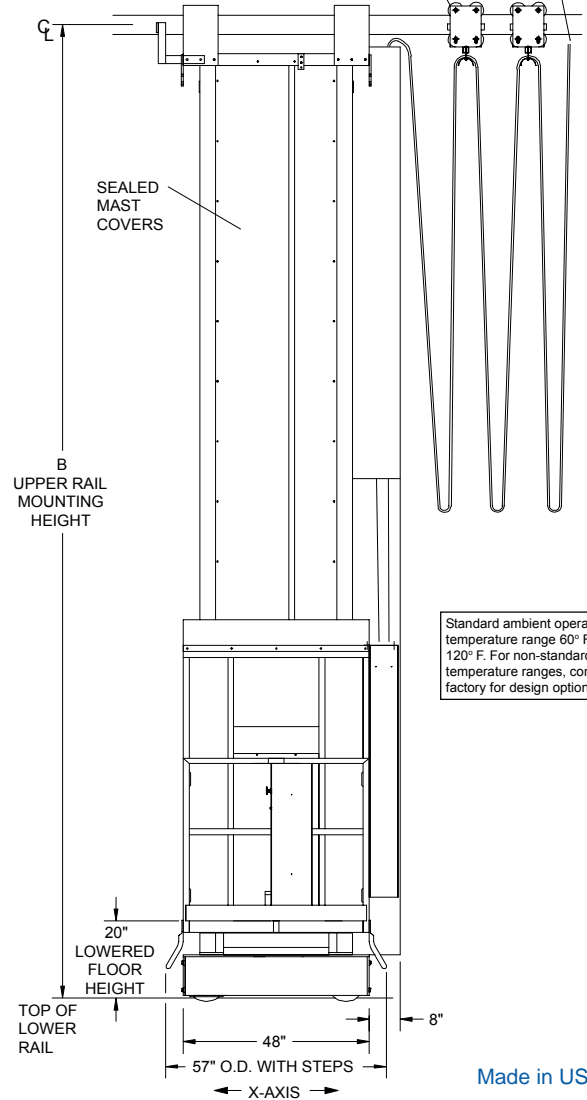
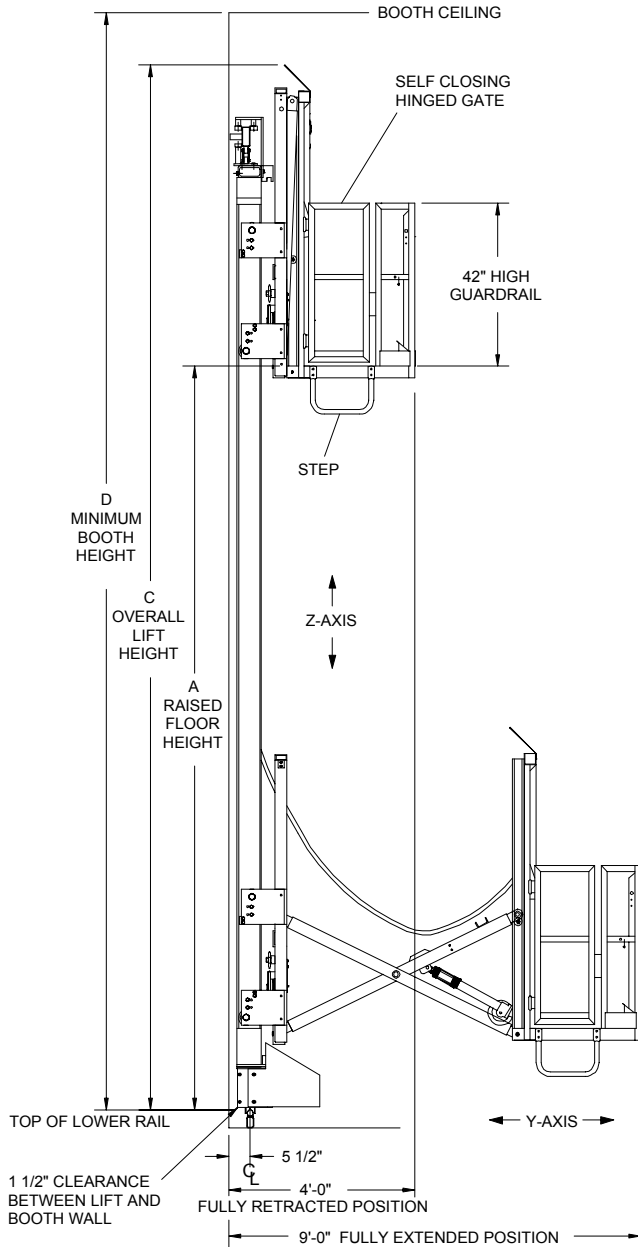
MULTI-AXIS MAST LIFTS

PRODUCT SPECIFICATIONS

Space Required for Festooning System in Stored Position		
Booth Length	Storage Space	Approx. # Carriers
0-50 Ft.	3 Ft.	4
50-80 Ft.	4 Ft.	6
80-120 Ft.	6 Ft.	9

If booth does not have enough length to allow access to ends of product, consult factory for options.

MAIN AIR SUPPLY:
CUSTOMER TO
SUPPLY PLUMBING
TO THIS POINT



Standard ambient operating temperature range 60° F to 120° F. For non-standard temperature ranges, consult factory for design options.

Made in USA

(LOWER RAIL IS DESIGNED TO SPAN 5 FT FOR USE IN GRATING FLOOR. FOR DETAILS, OR OTHER RAIL OPTIONS, CONSULT FACTORY.)

STANDARD MODEL	A	B	C	D
LP3-89	8'-0"	12'-11.25"	14'-6"	15'-0"
LP3-99	9'-0"	13'-11.25"	15'-6"	16'-0"
LP3-109	10'-0"	14'-11.25"	16'-6"	17'-0"
LP3-119	11'-0"	15'-11.25"	17'-6"	18'-0"
LP3-129	12'-0"	16'-11.25"	18'-6"	19'-0"
LP3-139	13'-0"	17'-11.25"	19'-6"	20'-0"
LP3-149	14'-0"	18'-11.25"	20'-6"	21'-0"
LP3-159	15'-0"	19'-11.25"	21'-6"	22'-0"
LP3-169	16'-0"	20'-11.25"	22'-6"	23'-0"
LP3-179	17'-0"	21'-11.25"	23'-6"	24'-0"
LP3-189	18'-0"	22'-11.25"	24'-6"	25'-0"
LP3-199	19'-0"	23'-11.25"	25'-6"	26'-0"
LP3-209	20'-0"	24'-11.25"	26'-6"	27'-0"

Dimensions are from top of lower rail.

INSTALLATION KIT (1 Required Per Lift)

Part Number: use LP3 [booth length] {booth height} with suffix IK
(i.e. LP36020-[↑]IK)

Kit Includes:

- Upper and Lower Rails for Mounting Lift to Booth Walls with Lower Rail Stops
- Festooning system with trolleys, main air supply hose and hose support grip. System is capable of carrying 1 additional line supplied by customer, up to 3/4" for breathing air.

Note: Model selected should not exceed the inside height of booth.

For calculation take the raised floor height (Dimension A) of the lift plus an additional 7' for personnel.

• All models meet applicable OSHA/ANSI Standards as interpreted by LPI, Inc. •

MULTI-AXIS MAST LIFTS

Photocopy and
fax to LPI® at:
715-839-8647

COMPANY NAME _____ DATE _____

CONTACT _____ PHONE _____ FAX _____

USER INDUSTRY: AIRCRAFT RAIL TRUCK TRANSIT OFF-ROAD INDUSTRIAL OTHER _____
(please specify)

PRODUCT APPLICATION: 3-Axis Lift for — Painting Blasting 4-Axis Lift
 Scissor Platform for — Track System Self-Propelled Manual
 Custom Designed System Wash Gantry

BOOTH INFORMATION

- Application: Retro-Fit ___ New ___
- Inside dimensions of booth:
Width _____ Height _____ Depth _____
- Booth design:
Down Draft _____ Cross Draft _____ Side Down Draft _____
Dry Filter _____ Water Wash _____
- Does existing booth have hipped ceiling lighting: Yes ___ No ___
If yes, hip size & degree _____
- Does existing booth have corner chambers: Yes ___ No ___
If yes, size _____
- Does existing booth have structure:
Yes, Inside ___ Yes, Outside ___ No ___
Structure size: Vertical _____ Horizontal _____
Distance between vertical supports: _____
- Is booth floor concrete, grating, or combination: _____
- Dimensions of concrete area from booth wall to grating: _____
- Location and type of lights in booth: _____

- Are lights inside access, outside access, or both: _____
- Are there mandooors in booth walls: Yes ___ No ___
If yes, where: _____

OPERATION

- Process being performed (i.e. Wash, Paint, Blast): _____

- Number of people doing process at one time: _____
- Cycle time - how many units/hour: _____
- Does operator need to get at ends of object: Yes ___ No ___
- Does operator need breathing air: Yes ___ No ___
- How many paintlines/hoses involved: _____
- Type of paint system (i.e. HVIP, Electrostatic, etc.): _____
- Size of hoses: _____
- Any additional equipment in or on lift: _____

OBJECT

**IMPORTANT: COORDINATE PRODUCT
ORIENTATION WITH BOOTH DIMENSIONS**

- Type of product: _____
- Shape of product (i.e. square, cylinder, etc.) _____
- Largest object:
Width _____ Height _____ Depth _____
- Smallest object:
Width _____ Height _____ Depth _____
- Is product on conveyor, track or monorail: _____
- Location of this conveyor, etc. in booth: _____

- If blast, type of media used: _____
- If wash, type of chemical used: _____

IMPORTANT: Please attach existing
booth print or pencil drawing.



LIFT SYSTEMS

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