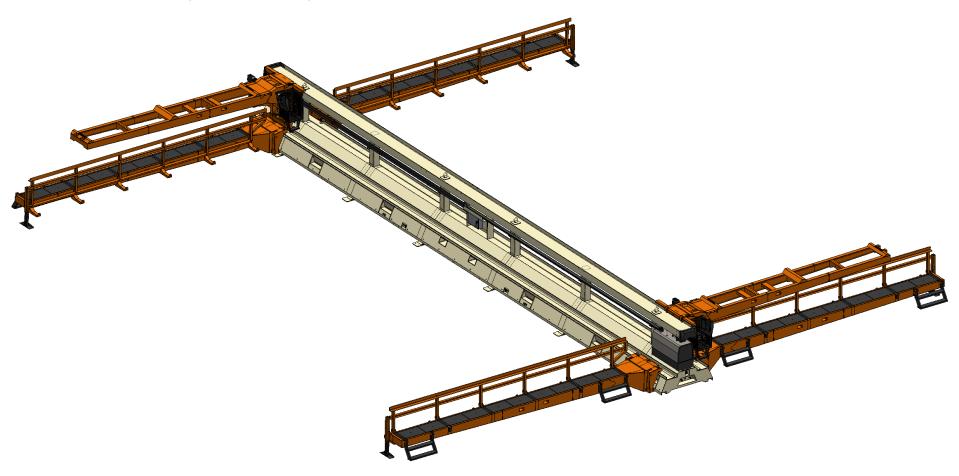
# **Panel Table**

EQUIPMENT SAFETY, OPERATION, AND MAINTENANCE



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# **Document Info**

This manual is intended to be used for the following Panel Table model numbers: PT-500.

InnovaTech, LLC, reserves the right to make technical changes for product improvement. This manual may contain illustration and photographs (for demonstration purposes) that may deviate from the actual product.

Safety information provided in this manual is a basic guide to help ensure safe operation. Warnings shown herein and on the Panel Table are NOT all-inclusive. InnovaTech, LLC, cannot anticipate every circumstance that might involve a potential hazard, and does not take responsibility for misuse of their products. Therefore, the Panel Table user takes full resposibility to follow safety guidelines and use common sense to avoid accidents.

If you have any questions or concerns about the content of this manual, we want to hear from you. Please e-mail us at support@innovatechservice.com or contact us by mail at:

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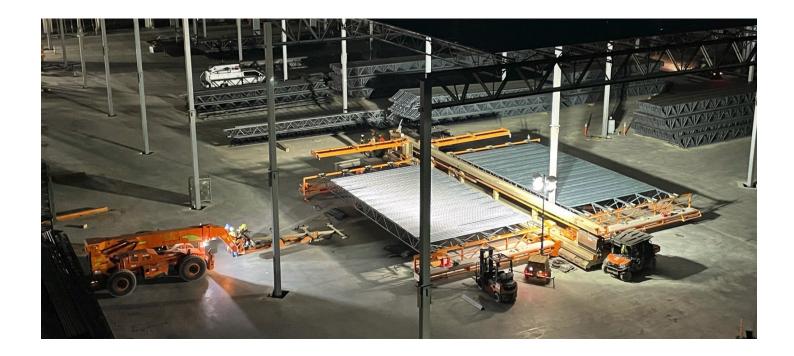
The InnovaTech, LLC, Panel Table is under US PATENT PENDING protection.

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# **Panel Table**

### **Overview**

The Panelization Table is specifically designed to template pre-manufactured steel roof joists and beams for assembly into panelized modules at the job site. The table's basic structure consists of two panel-building jigs, one on each side of the main frame. This allows a panel to be arranged and assembled on one side, while another panel on the opposite side is being prepared for lifting and final positioning into the building structure. The panelized modules are to be lifted by crane or Mezzmaster to the final installation point in the structure. This equipment enables workers to assemble the roof and mezzanine components onsite and at ground level in an efficient and accurate manner, while reducing the potential safety risks common to steel erection.



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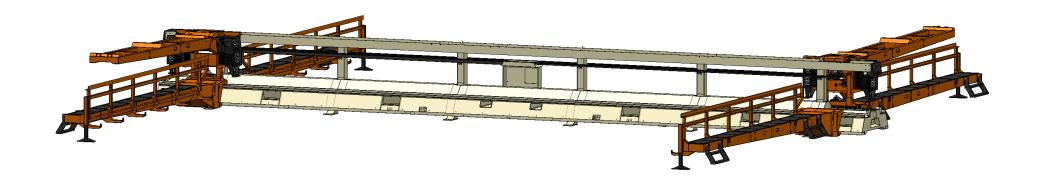


Fig. 1: Deployed Mode

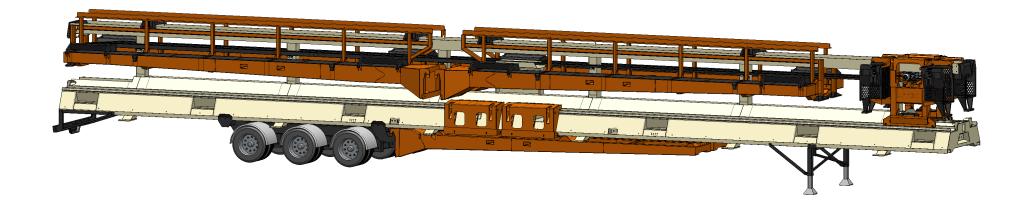


Fig. 2: Stow Mode

# **Safety**

# **Safety Markers**



This is the safety alert symbol. It is used to alert you to the potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

### **△ CAUTION**

Indicates a potentially hazardous situation. If not avoided, may result in minor or moderate injury. It may also alert against unsafe practices. This marker will have a yellow background.

#### *∧* **WARNING**

Indicates a potentially hazardous situation. If not avoided could result in serious injury or death. This safety marker will have an orange background.

### **△ DANGER**

Indicates an imminently hazardous situation. If not avoided, will result in serious injury or death. This safety marker will have a red background.

### General

- DO NOT OPERATE the machine while under the influence of alcohol or drugs.
- DO NOT OPERATE equipment unless you have been trained and qualified in safe equipment operation.

## **Pre-Operation Inspection Checklist**

Perform a pre-operation inspection at the beginning of each work shift. DO NOT perform the pre-operation inspection with the engine running or hot. Contact with moving or heated parts could cause serious injury.

- Perform the pre-operation inspection and functional tests in an open area and away from any other obstacles or equipment. Inspections and functional
  tests may require assistance. Keep assistants and other workers visible and a safe distance from the Panel Table during inspection to prevent death or
  serious injury.
- Become familiar with all safety and hazard labels, regulations, and procedures. Make sure all proper safety and hazard labels are attached to the Panel Table and remain legible.
- Read and understand all operating instructions to prevent death, serious injury, or equipment damage.
- Keep fingers and feet away from moving parts or pinch points to prevent pinching or crushing.

### Walk around the ENTIRE Panel Table while visually performing the pre-operation inspection:

- Verify "Do Not Operate" tags have not been placed on the Panel Table.
- Verify the Operation and Safety Manual is in the protective case and legible.
- Check for loose or missing bolts and nuts.
- Check electrical connections.
- Check for loose or damaged belts, hoses, and radiator fan blades.
- Check coolant reservoir level. Add radiator coolant, if necessary.
- Check engine oil level. Add engine oil, if necessary.
- Check electrical wires and connectors.
- Check battery terminals for corrosion.
- Check battery for cracked, melted, or damaged case.

- Check that all labels are present and legible. Replace any damaged or illegible labels.
- Check that personal belongings are secured in the personal storage box.

### **Modifications**

#### **△ WARNING**

Modifications to the Panel Table or attachments could affect table capacity and/or stability which could result in death or serious injury. DO NOT make modifications to the Panel Table or attachments without prior written approval from InnovaTech, LLC. Where such authorization is granted, capacity, operation, and maintenance instruction plates, tags, or labels shall be changed accordingly.

- Unauthorized modifications or alterations will void the warranty.
- DO NOT modify, disable, or bypass any safety devices.
- DO NOT burn or drill holes in attachments.

## **Mounting/Dismounting**

#### **MARNING**

Failure to use proper safety procedures when mounting and dismounting the Panel Table could result in serious injury.

- · Keep steps clear of dirt, mud, snow, ice, debris, and other hazards.
- Face the Panel Table for mounting.
- DO NOT use the controls as hand holds or steps. Avoid accidentally engaging or disengaging a control.
- DO NOT jump from the Panel Table. Clothing can get caught. Landing on uneven surfaces could result in injury.

# **Worksite Safety**

### **MARNING**

Use proper safety procedures and avoid hazardous situations while operating the Panel Table to prevent death, serious injury, or property damage.

- Keep the work site clear of any hazards while operating the Panel Table.
- Check the work surface for loose soil conditions and overhead power lines.

- Know about underground hazards.
- DO NOT allow bystanders in the work area.
- Follow work site signs and signals.
- Stop for poor visibility conditions, such as dust, smoke, fog, etc. Wait until visibility improves before continuing.
- Operate the Panel Table in an enclosed area only if there is a ventilation system capable of routing hazardous fumes outside. Engine exhaust contains products of combustion that could cause death or serious injury.
- DO NOT operate the Panel Table if you are using drugs, alcohol, or any medication that might impair your judgment or ability.
- You must be 18 years of age or older to operate the Panel Table.

#### **MARNING**

Check warning indicators and gauges frequently during operation. If a warning indicator is illuminated or a gauge shows abnormal readings, stop the Panel Table, follow proper shut down procedures. Follow proper lock-out/tag-out procedures. Tag the Panel Table with "Do Not Operate" tags, and have a qualified mechanic perform service or repair before placing the unit into service again. Ignoring warning indicators can result in death, serious injury, or property damage.

## Maintenance, Service, & Repair

Follow the manufacturer's instructions for proper maintenance to make sure the Panel Table continues to meet manufacturer's specifications. Failure to properly maintain the Panel Table can result in improper performance, which could cause death, serious injury, or property damage.

- Attach "Do Not Operate" tags to the Ignition switch and gantry controls before beginning any service or maintenance.
- The "Do Not Operate" tags indicate the Panel Table should not be operated until all service or maintenance is completed.
- Make sure basic maintenance is completed and service problems are corrected. Keep two (2) legible "Do Not Operate" tags with the Panel Table at all times.
- DO NOT operate the Panel Table or attachments if they require repair.
- Death or serious injury can result from operating the Panel Table before all repairs have been made and all proper maintenance is completed.

## Lockout/Tagout (LOTO)

If the Panel Table is shut down for maintenance, or if it is unsafe to operate:

- 1. Turn off welder.
- 2. Turn main power switch (located near center of main frame) to "OFF" position.
- 3. Apply lock and tag to power switch.

## **Emergency Stop (E-Stop)**

Emergency stops are located on each manbasket, and on both ends of main frame. Each stop module has a light for indicating whether any E-Stop is pressed or not.

- If no E-Stop is pressed, all lights are green.
- If one E-Stop is pressed, target E-Stop light turns red while all other E-Stop lights shut off.

### **Support Equipment**

In conjunction with the Panelization System, workers should adhere to the safety requirements and the proper operation and maintenance of support equipment such as welders, fastening tools, lifting equipment, material handling equipment, etc., as well as maintaining a realistic understanding of your own physical strength and endurance.

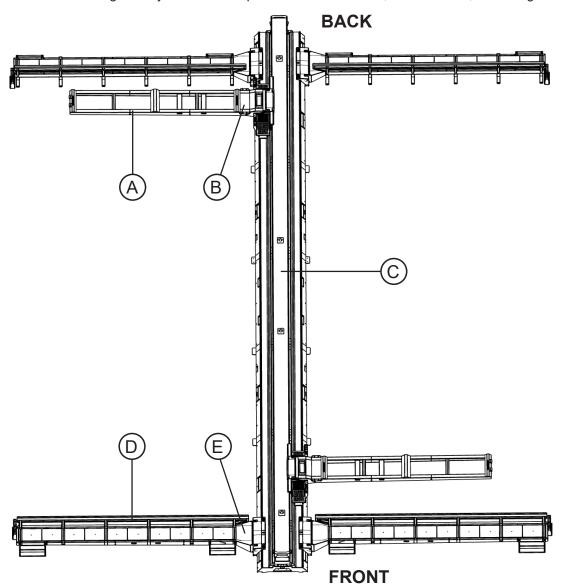
PT-500 is equipped with a Lincoln Electric Vantage 322 welder. Refer to the unit specific manual for details on safety and maintenance.

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# **Nomenclature**

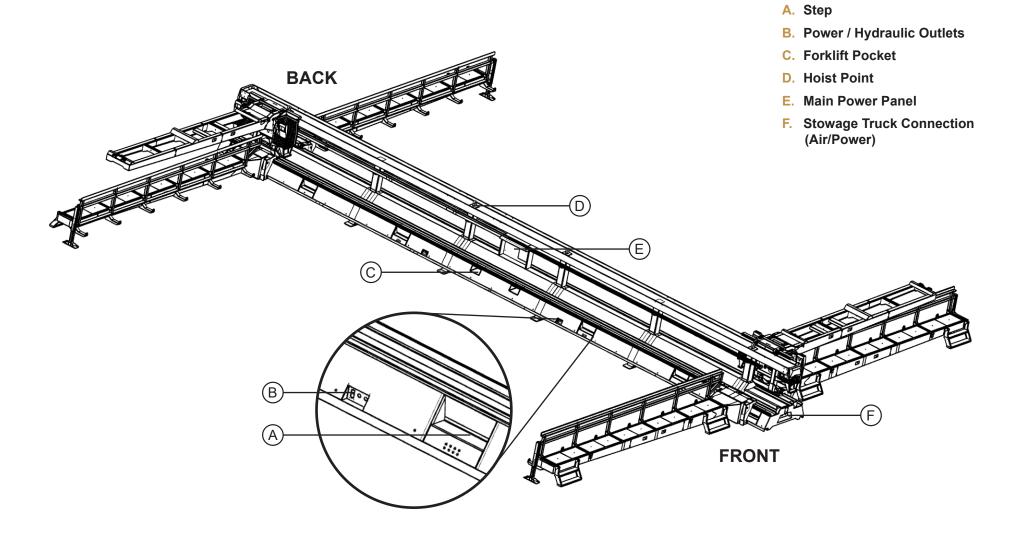
### General

The Panel Table consists generally of seven components - a main frame, four catwalks, and two gantries.



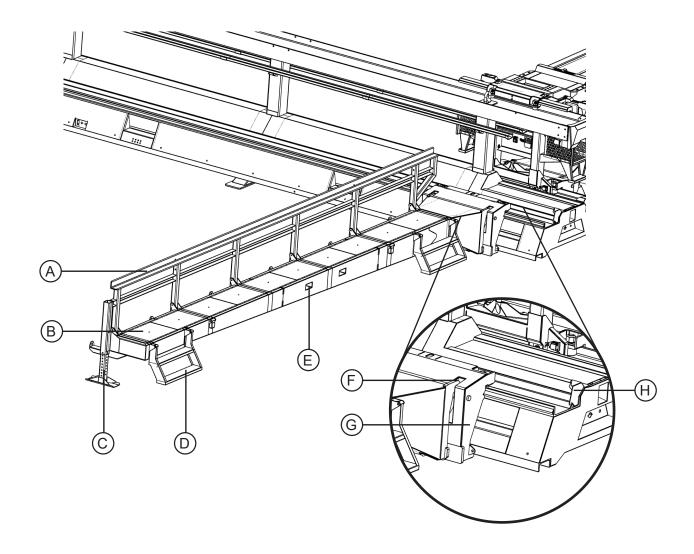
- A. Gantry Arm
- B. Gantry Carriage
- C. Main Frame
- D. Catwalk Arm
- E. Catwalk Carriage

## **Main Frame**



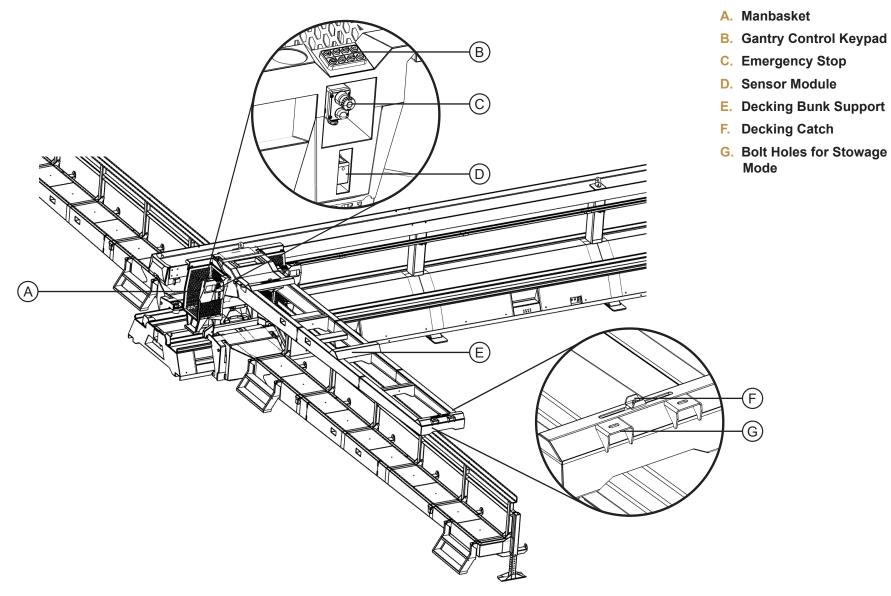
**Panel Table** 

# Catwalk



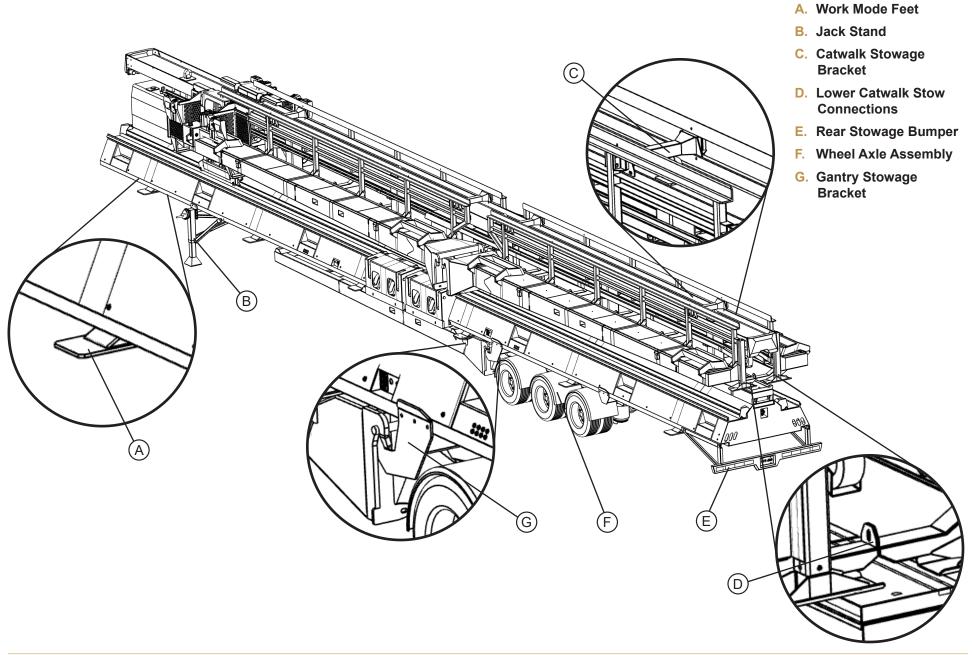
- A. Beam / Joist Pocket Rail
- B. Catwalk Platform
- C. Jack Stand
- D. Step
- E. Forklift Pockets
- F. Catwalk Connection Point
- G. Catwalk Carriage
- H. Catwalk Stop Target

# Gantry



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# **Stow-Mode Specific Components**



# **Mobilization**

# Receiving

- Entrance to the side should be accessible by forklift.
- The Stowage Mode diagram below illustrates the layout the overall size of the equipment in shipping configuration. Use this information to calculate the space requirements for equipment through roadways, gates and structure sizes.

# **Specifications**

Description	Stowage Mode	Deployment Mode	
Front View	A B T	T A B B	
Side View	C C		
Height	<b>A.</b> 12 ft. 3 in.	<b>A</b> . 8 ft. 9 in.	
Width	<b>B.</b> 9 ft. 1.5 in.	<b>B.</b> 67 ft. 9 in.	
Length	<b>C.</b> 80 ft. 11 in.	<b>C.</b> 80 ft. 11 in.	
Weight	62,619 lbs	57,710 lbs	

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#### Lifting Device

■ Ensure that the handling equipment utilized meets the load ratings necessary to accomplish the unloading and assembly of the machine. Utilize proper lifting points to avoid damage to the Panel Table.

### Rigging

■ Experienced shipping and rigging professionals should handle the maximum load of the equipment.

#### Insurance

■ Proper insurance coverage is advised.

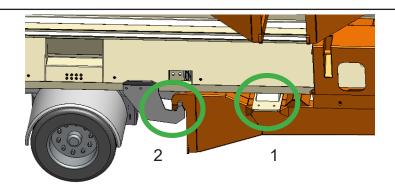
# **Assembly**

Use appropriate lifting/moving equipment to assemble Panel Table.

### **Disconnect Gantries from Stow Position**

Follow these steps for both gantries:

- 1. Remove bolts securing gantry arm to Work Mode Feet.
- 2. Use forklift to lift gantry off *Gantry Stowage Brackets*. Set gantry aside.



### **Disconnect Catwalks from Stow Position**

Follow these steps for all four catwalks:

- 3. Unbolt catwalks at Lower Catwalk Stow Connections. (see fig. 3)
- 4. Unbolt Catwalk Stowage Brackets located along top of main frame. (see fig. 4)
- 5. Use forklift to lift catwalks off bracketry. Set catwalks aside.
- 6. Store Catwalk Stowage Brackets in bin for future use.

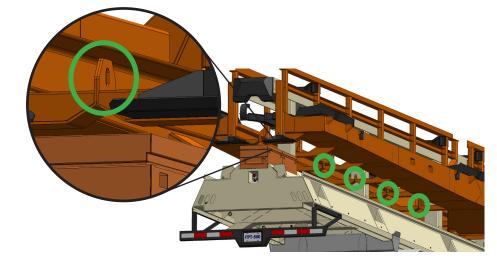
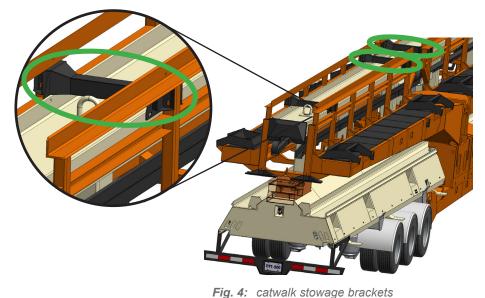


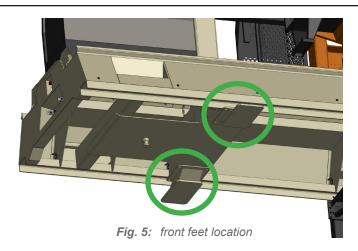
Fig. 3: interior connection points



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## **Install Front Feet**

7. Bolt front feet (stowed separately) to 5th-wheel plate.



# **Disconnect Axle Assembly from Main Frame**

- 8. Use lift/hoist to maintain position of main frame.
- 9. Unbolt axle and jack stand assemblies. (see fig. 5)
- 10. Disconnect all air/power connections. (see fig. 6)
- 11. Lift/hoist main frame; remove jack stand, bumper and axle assemblies.

### **△ WARNING**

DO NOT work beneath a suspended load.

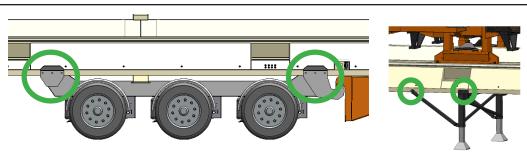


Fig. 6: side view; disconnection points

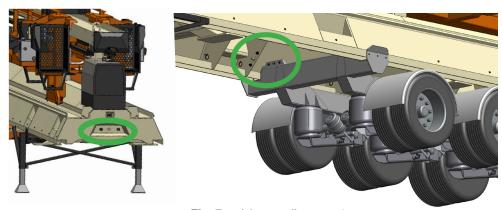


Fig. 7: air/power disconnect

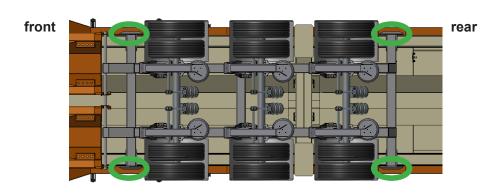


Fig. 8: underside view; disconnection points

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# **Disassembly**

Reverse assembly steps; bolt stowage components to prepare for stowing.

## **Site Requirements**

The space necessary for assembly should allow for sufficient lift equipment access around the perimeter of the equipment.

# **Operating Conditions**

- Concrete Surfaces preferred surface for assembly and operation.
- Earth capable of operating on prepared groundwork prior to building floor surface installation.
- Adverse weather conditions may limit operation. Remain in contact with official weather forecast information.

### **Fuel Requirements**

- Type Diesel
- Amount 20gal

## **Operation**

Catwalks are set apart to the length of the joists or beams being used. Beam/joist pockets are placed on top of the catwalk rail and spaced to layout of structure. Beams/joists are placed in pockets. Ground worker welds/bolts cross-bracing between joists. A bunk of decking is placed on panel table's gantry arm. The gantry arm is then driven down the length of the trusses, allowing workers to pull the decking off the top of the bunk and place it on the top of the trusses. Then decking must be attached per OSHA minimum requirement.

Once panel construction is complete, panel may be hoisted by crane or lifted by an InnovaTech Mezzmaster.

# **Material Handling**

Storage of B-decking sheeting bunks can be placed in a nearby location for convenient access when replenishing supply needed for the moving gantries. Angle iron material for purlins and cross members can be store beneath the catwalk decking for easy access by the weld workman who is performing the groundwork. The actual open web steel roof joists should be delivered onsite and organized to facilitate proper layout of the building structure and allow easy forklift access for continuous assembly of the components.

# **Maintenance**

All bearings and rollers on Panel Table are sealed and are maintenance-free. The gear boxes on the drive wheel of the gantries have an oil level fill plug that should be checked annually. The Panel Table is powered by a welder that should be serviced according to manufacturer's specification.

# **Contact Us**

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