

# InnovaTech HPU 15.50

## OPERATION & SAFETY

HPU  
15.50



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**HPU-15.50**

HPU15.50-MNL1-R00

# Manual Revision Log

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## Document Information

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This manual is intended as a basic source of information on the safe operation and maintenance of InnovaTech Manufacturing's HPU 15.50. This manual provides general information as well as specific warnings, instructions, and information that workers using this machine must read, understand, and follow.

This manual is not intended as an all-encompassing "rule-book" on operation safety. Instead, InnovaTech Manufacturing presents this information as a reference and guide only. It is the purchaser's and operator's responsibility to identify specific safety hazards and determine proper procedures to prevent those hazards from inflicting injury.

Safety is paramount in the operation of this machine. A copy of this manual should be made available to all persons using this machine. This manual is available online at <https://innova.tech>.

All information in this manual is based on the latest product information at the time of publication. However, there may be design improvements from time to time so that photographs, text, and sketches within the body of this manual may not exactly match your machine. InnovaTech Manufacturing's responsibility, financial or otherwise, for any consequences arising out of the use of this manual or its machine is limited by our product warranty. The information contained herein is subject to change, and revisions may be issued to advise of such changes. InnovaTech reserves the right to make product changes at any time without obligation.

This manual contains subject matter to which InnovaTech Manufacturing has proprietary rights. Recipients of this document shall not duplicate, use, or disclose information contained herein, in whole or in part, for any use other than for machine operator use and for training personnel on safe operation and maintenance of this machine.

If you have any questions or concerns about the content of this Machine Use and Safety Manual or, if you would like to request updated information, we want to hear from you.

Please contact us:

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## Document Information

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### 2. Overview

### 3. Operation

### 4. Specifications









### 5. Maintenance

### Appendix

# 1. Safety

## 1.1 Safety Alerts


Before operating this machine, read this manual completely and carefully to understand the safety instructions. Comply with all DANGER, WARNING, and CAUTION notices.

Hazard Level	Signal Word	Signal Color	Signal Symbol	Signal Example	Signal Meaning
Extreme	DANGER	RED			<b>DANGER</b> indicates a hazardous situation which, if not avoided, <b>WILL</b> result in death or serious injury.
High	WARNING	ORANGE			<b>WARNING</b> indicates a hazardous situation which, if not avoided, <b>COULD</b> result in death or serious injury.
Medium	CAUTION	YELLOW			<b>CAUTION</b> indicates a hazardous situation which, if not avoided, <b>MAY</b> result in moderate injury.
Low	CAUTION	YELLOW	no symbol		<b>CAUTION</b> (without a symbol) indicates a hazard or practice not related to personal injury.
NA	NOTICE	BLUE	no symbol		<b>NOTICE</b> addresses practices not related to personal injury, but may give information for safe use.

## 1.2 Safety Considerations

### A. E-Stop and Guages

The HPU 15.50 is manufactured with guages and an Emergency Stop. Understand what the guages are for and keep an eye on them. Push the E-Stop to shut down the engine.


 **WARNING SAFETY DEVICES!** The potential for an accident increases when safety devices do not function properly. Death or serious injury could result from such accidents. Do not alter, disable, or override any safety device.

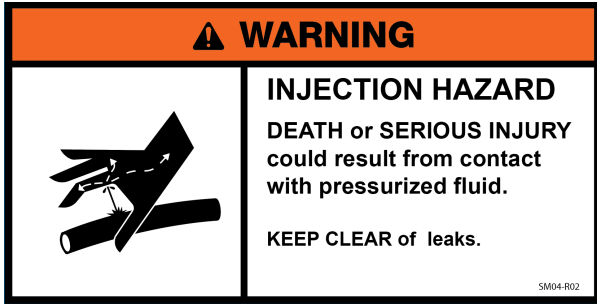
### B. Hydraulic Leaks

To ensure safe and efficient function of the HPU, check hydraulics daily for leaks. If there are leaks, lock the machine and tag it out of service until the leaking components are fixed or replaced.

Be aware of hydraulic injection hazards. The hydraulic system has hoses with hydraulic fluid under pressure. Use a piece of cardboard or wood to search for leaks.

Hydraulic fluid escaping under pressure can have enough force to inject fluid into the flesh (even through a glove). In case of hydraulic injection, seek medical attention at once.

 **WARNING DAMAGE OR MALFUNCTION!** The potential for an accident increases when operating a machine that is damaged or malfunctioning. Death or severe injury could result from such accidents. Do not operate the HPU 15.50 if it is damaged or malfunctioning.



### C. Ventilation

This machine uses a diesel engine which produces exhaust that could be harmful. Ensure adequate ventilation is provided.

### D. Batteries

Be aware of the risks of Battery acid. Handle batteries with care. Batteries that are allowed to run dead and then freeze may be damaged and may have to be replaced. Keep batteries properly charged. Keep batteries sealed and away from sparks and open flame.

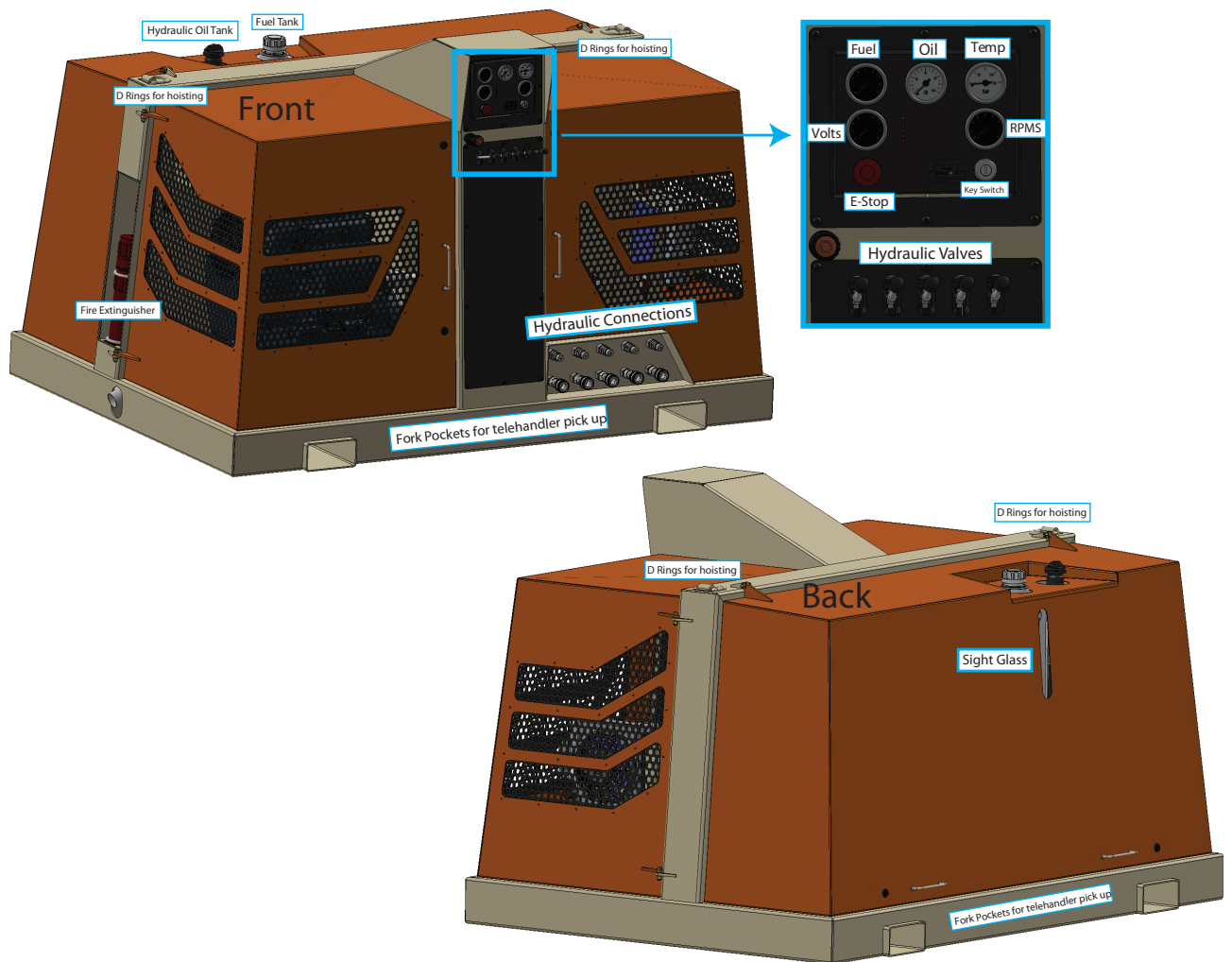
**WARNING** CALIFORNIA PROPOSITION 65 **WARNING!** Battery posts, terminals, and related accessories contain lead components, chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

## 2. Overview

### 2.1 General

The HPU 15.5 is a hydraulic power unit manufactured by InnovaTech. HPU's are the main driving components of any hydraulic system. The HPU is comprised mainly of a motor, a reservoir and a hydraulic pump, the HPU 15.50 can pump 15.5 gallons of oil per minute. It can be used when high volume, high pressure applications are necessary.

### 2.2 Nomenclature



## 3. Operation

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### 3.1 General

The HPU is powered on and off with a key switch. It runs on diesel. Before starting a diesel engine wait for the glow plugs light to turn off.

In case of an emergency push the E-Stop. Pushing the E-Stop immediately shuts down the engine.

### 3.2 Operating HPU 15.50

1. Hook up hydraulic hoses to the HPU. Ensure connections are snapped in place.
2. Start the engine. Allow the engine to run for a few minutes to warm up before activating hydraulic controls.
3. Actuate valve(s) This HPU has 5 hydraulic circuits that are actuated by mechanical valves on the face of the machine. Valves can be actuated one at a time or more than one at a time.

### 3.3 Routine Inspection

1. Inspect hydraulic oil level sight glass to ensure oil level is sufficient.
2. Check engine oil
3. Inspect for Hydraulic leaks

### 3.4 Transporting HPU 15.50

The InnovaTech HPU has fork pockets on the bottom for lifting by telehandler and D Rings on the top for hoisting by crane. The fork pockets can also be used for tie down points during transport.

## 4. Specifications

### General

#### Dimensions

Length ..... 88 in.  
Width ..... 65 in.  
Height ..... 56 in.

**Weight including oil** ..... 3300 lbs

### Systems

#### Hydraulic System

Pump Capacity ..... 15.5 gallons gpm  
Max Pressure ..... 3200 psi  
Normal Pressure ..... 3000 psi  
Hydraulic Tank Capacity ..... 125 gallons  
Ambient Oil Temperature Range

Minimum ..... 120°  
Maximum ..... 170°

Hydraulic Fluid Type ..... AW46

Hydraulic Filter ..... Don-p164378

#### Engine

Make ..... Deutz  
Model ..... D 2011 L021  
Fuel Type ..... Diesel  
Fuel Tank Capacity ..... 20 Gallons  
Fuel Filter ..... BAW-BF7736  
Engine Oil Type ..... 15W40  
Engine Oil Capacity ..... 6 quarts  
Oil Filter ..... DEZ-01174416  
Air Filter ..... DEZ-02934587  
Belt Size ..... DEZ-05063447  
Battery Voltage ..... 12 Volt



## 5. Maintenance

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### 5.1 General

The HPU is powered by a Deutz brand Diesel engine that requires routine service. Follow Deutz's recommended maintenance schedule. Basic service information is included for your convenience. The HPU also has a hydraulic system that requires routine service.



**IMPORTANT!** If the machine does not operate properly, turn it off immediately! Tag it "Out of Service." Do not operate the machine until it is safe for operation.

### 5.2 Maintenance

#### 250-Hour

- Initial break-in engine oil change

#### 500-Hour

- Change engine oil

#### 1000-Hour

- Change engine air filter
- Change hydraulic oil filter

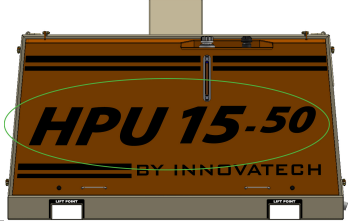
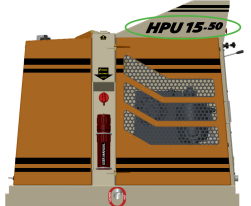
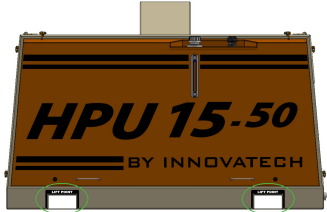
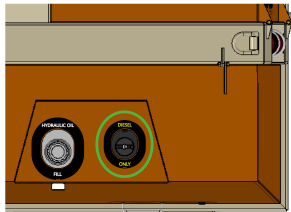
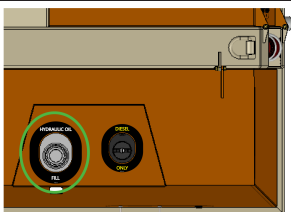
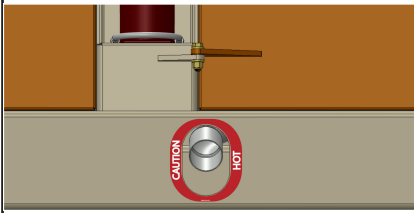
#### 2000-Hour


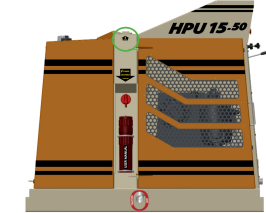

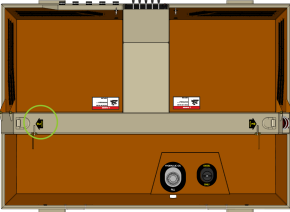

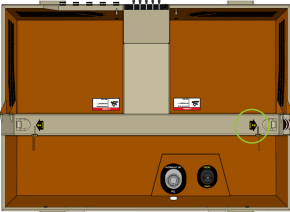

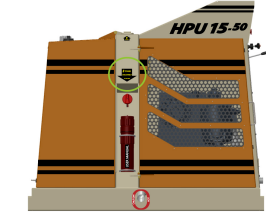

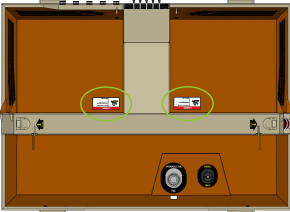

- Change belt
- Change hydraulic oil

### 5.3 Modification

Do not modify the machine. Replace malfunctioning parts with identical make and manufacture.

## Appendix: Labels and Decals

Decal and Label Chart			
Decal ID	Qty	Decal Visual	Decal Application
INN-HPU15.50-01R1	1	<b>HPU 15-50</b>	
INN-HPU15.50-02R1	2	<b>HPU 15-50</b>	
INN-HPU15.50-03R1	4	<b>LIFT POINT</b>	
INN-HPU15.50-12R1	1	<b>DIESEL ONLY</b>	
INN-HPU15.50-13R1	1	<b>HYDRAULIC OIL FILL</b>	
INN-HPU15.50-15R1	1	<b>CAUTION HOT</b>	

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<p>INN-HPU15.50-05R1</p>	<p>1</p>																																										
<p>INN-HPU15.50-06R1</p>	<p>1</p>																																										
<p>INN-HPU15.50-07R1</p>	<p>1</p>																																										
<p>INN-HPU15.50-16R1</p>	<p>2</p>																																										
<p>INN-HPU-MP18-V01</p>	<p>1</p>	<table border="1"> <thead> <tr> <th colspan="4">Hydraulic Power Unit HPU 15.50 BY INNOVATECH</th> </tr> <tr> <th colspan="4">InnovaTech Manufacturing</th> </tr> <tr> <th colspan="4">4360 North WESCO Rd. Cedar City, UT 84721 • USA support@innovatech.com</th> </tr> </thead> <tbody> <tr> <td>SERIAL</td> <td>HPU15.50-1-2210197</td> <td>MODEL</td> <td>HPU15.50</td> </tr> <tr> <td>WIDTH</td> <td>65 in</td> <td>YEAR</td> <td>2022</td> </tr> <tr> <td>LENGTH</td> <td>88 in</td> <td>WEIGHT</td> <td>3,300 lbs</td> </tr> <tr> <td>HEIGHT</td> <td>56 in</td> <td>Max Pressure</td> <td>3,000 psi</td> </tr> <tr> <td>Reservoir Capacity</td> <td>117 gal</td> <td>Normal Op. Pressure</td> <td>2,500 psi</td> </tr> <tr> <td colspan="4">Hydraulic Fluid   AW 46</td> </tr> <tr> <td colspan="4">MADE IN USA</td> </tr> </tbody> </table>	Hydraulic Power Unit HPU 15.50 BY INNOVATECH				InnovaTech Manufacturing				4360 North WESCO Rd. Cedar City, UT 84721 • USA support@innovatech.com				SERIAL	HPU15.50-1-2210197	MODEL	HPU15.50	WIDTH	65 in	YEAR	2022	LENGTH	88 in	WEIGHT	3,300 lbs	HEIGHT	56 in	Max Pressure	3,000 psi	Reservoir Capacity	117 gal	Normal Op. Pressure	2,500 psi	Hydraulic Fluid   AW 46				MADE IN USA				
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