

# INSTALLATION GUIDE AND USER MANUAL



NovaPeak 5000 Series

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## SAFETY

### WARNING



THE NOVAPEAK IS NOT A BATTERY AND SHOULD NOT BE TREATED AS ONE

### WARNING



DANGER - HIGH CURRENT HAZARD!

### WARNING



DO NOT CONNECT IN REVERSE POLARITY

### WARNING



DO NOT SHORT CIRCUIT AS IT WILL PERMANENTLY DAMAGE THE NOVAPEAK

### WARNING



DO NOT DROP

Do not operate the NovaPeak above 16V continuous.

Do not operate the NovaPeak above the specified temperature rating of +55°C (131°F).

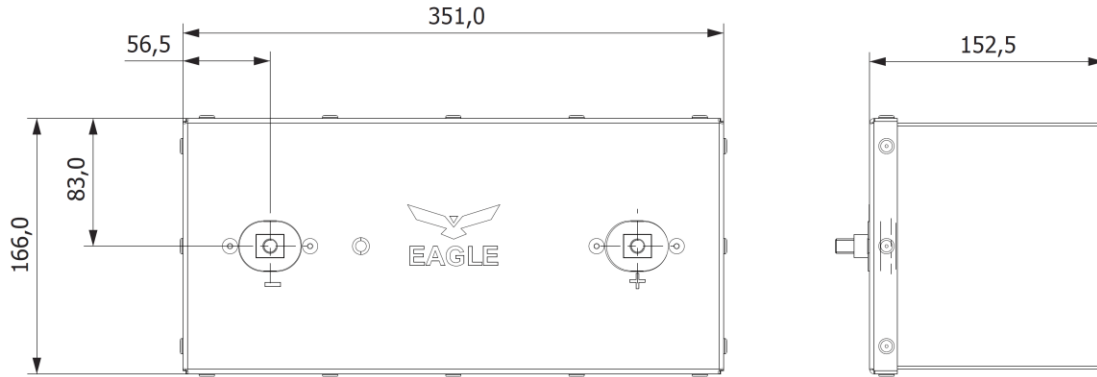
Make sure to protect the terminals from accidental shorting. Causing a short circuit will void the warranty and render the NovaPeak unusable.

## INTRODUCTION

The NovaPeak 5000 series is specifically designed to supply maximum power to the hydraulic power unit (HPU) on your trailer. The NovaPeak replaces your 12V battery by providing you with the perfect reliable solution for years on. It is designed to recharge with the auxiliary current from the 7-Way trailer connector on your vehicle, therefore, eliminating the hassle of dealing with a battery charger.

## SPECIFICATIONS

ELECTRICAL	
Rated Voltage Range	12-16V
Rated Capacitance	5000F
Effective Energy Storage	80Wh
Capacitance Tolerance	±20%
ESRDC	≤10mΩ
Rated Operating Current	280A
Max Current	300A
Cycle life	50 000 cycles
TEMPERATURE	
Operating Temperature	-5°C to 55°C / 23°F to 131°F
PHYSICAL	
Dimensions	166mm x 351mm x 152mm - 16 1/2" x 13 15/16" x 5 15/16"
Terminals	3/8-16UNC
Weight	8.6 kg / 19 lbs



**Figure 1** : NovaPeak 5000 series dimensions

## UNPACKING

Before unpacking the NovaPeak 5000 series, inspect the box for any signs of damage. If the box presents signs of damage, contact your carrier and do not open the box until the product has been thoroughly inspected. Remove the NovaPeak straight up from the box.

## INSTALLATION

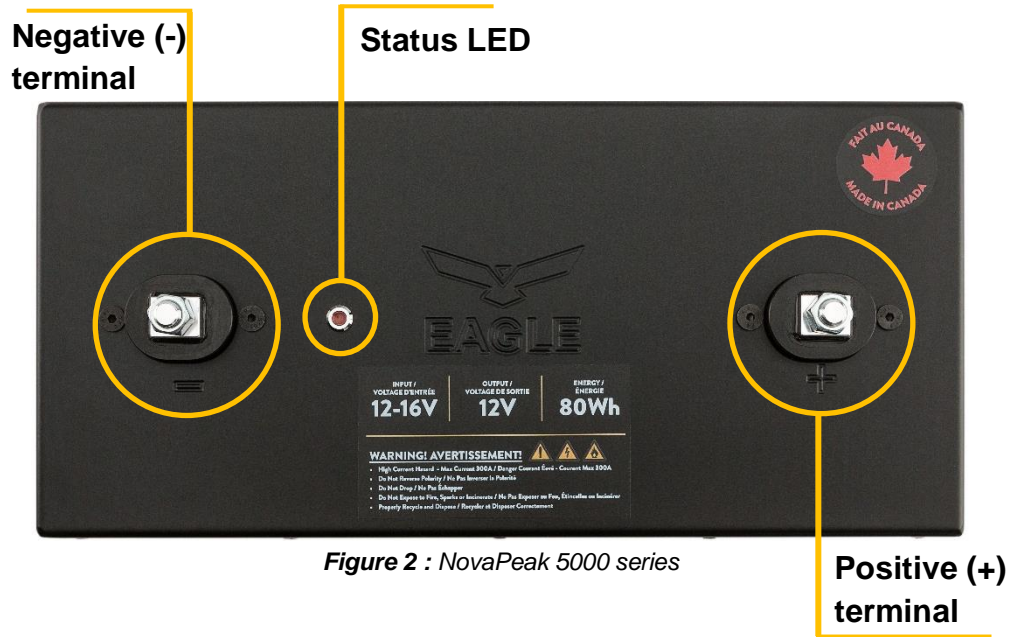
The following items are not included with the NovaPeak 5000 series but may be necessary for installation.

- Standard shop tools
- 2 cables to connect the NovaPeak to the Power Unit

## MOUNTING

The NovaPeak requires a mounting bracket to fasten it to the trailer. Eagle Hydraulic sells the mounting support separately if needed (part #810810). For reference, the NovaPeak is designed to be mounted in the same space as group 27-31 batteries.

## ELECTRICAL SCHEMATIC



## CABLE SELECTION

Select the proper cable size to connect the Power Unit to your Eagle Hydraulic NovaPeak from the chart below. Improper cable sizing may create problems if it is too small for the load of the HPU or if the cables are too long. Selecting the proper cable size is especially important if the HPU is further than 25 feet from the NovaPeak. Eagle Hydraulic recommends that the ground cable size be equivalent or larger than the battery "hotside" cable.

Table 1 : Cable Size

50-60 ft	#0		
40-50 ft	#0	#00	
30-40 ft	#0	#00	#00
20-30 ft	#1	#0	#00
10-20 ft	#1	#0	#00
0-10 ft	#1	#0	#00
	150-200 amp	200-250 amp	250-300 amp

**N.B.** If in doubt, always consult with a qualified automotive technician for the correct connection of DC electrical devices. Low voltage could cause damage to the DC motor. DC motors should not be run for extended periods

## WIRING INSTRUCTIONS

The NovaPeak 5000 series charges directly with the auxiliary current provided by the 7-Way trailer connector on your vehicle.

1. If you had a battery already installed on your trailer, disconnect the battery by removing all the cables connected to it and remove the battery from the trailer.
2. Secure the NovaPeak in the appropriate mounting bracket on your trailer.
3. Connect the auxiliary current wire from the 7-Way trailer connector to the positive terminal of the NovaPeak.

The trailer manufacturer should have run the wires already to the battery installation location. If not, please read the instruction from the connector's manual to identify the correct auxiliary current wire. The color of the wiring for the auxiliary power in the 7-Way trailer connector can vary from one model to another. Figure 3 presents an example of the wiring schematic to connect the 7-Way trailer connector to the NovaPeak.

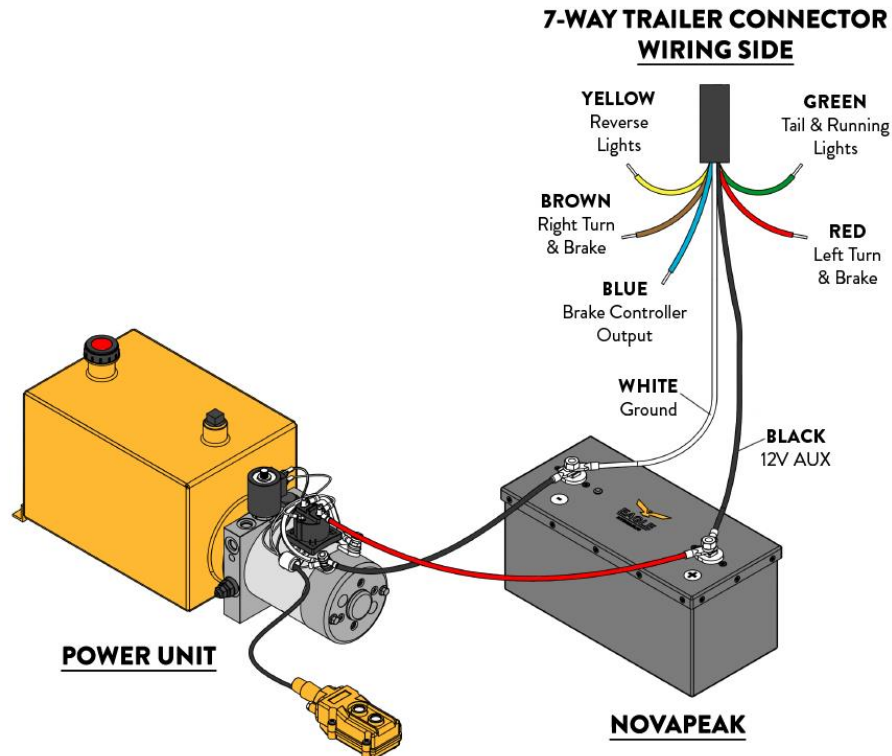


Figure 3 : Wiring Schematic

4. Connect the ground wire from the 7-Way trailer connector to the negative terminal of the NovaPeak (Fig. 3).
5. Connect the ground cable from your HPU to the negative terminal of the NovaPeak. (Fig. 3).
6. Connect the power cable from the starter of your HPU to the positive terminal of the NovaPeak. (Fig. 3).
7. Install the 7-Way trailer connector in the tow plug on your vehicle.
8. After all the connections have been fastened securely start the vehicle. The NovaPeak will fully charge as the vehicle runs. It should take about 30 minutes for the first full charge. Depending on the model and year of your vehicle you might have to do different steps to activate the auxiliary current. Please refer to your dealer for more information about your vehicle.

## MAINTENANCE

All Eagle Hydraulic NovaPeak are designed to give a long, trouble-free service life. Periodically check the terminals for oxidation and tightened loose connections if necessary.

## STORAGE

The NovaPeak can be stored in its original package in a dry place. Make sure to store the NovaPeak upward in the required storage temperature as stated in the specifications section.

## DISPOSAL

Dispose in accordance with the local regulations for electronic waste. DO NOT:

- Incinerate
- Recycle with batteries
- Crush
- Dispose of in trash

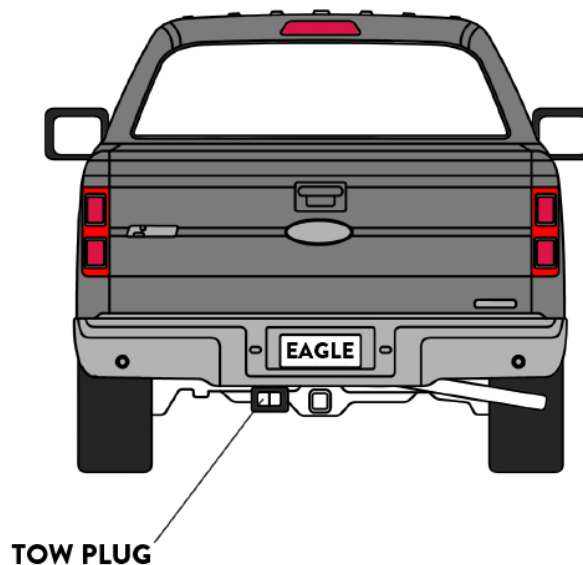


## TROUBLESHOOTING

Please use this guide to easily troubleshoot your Eagle Hydraulic NovaPeak. It is recommended to go through each step, as this guide has been created in a logical sequence. If followed from top to bottom, you should go through all possible symptoms and should be able to find the problem.

### 1. The NovaPeak is not charging

- A. **The auxiliary current** from the tow plug on your vehicle, where you connect your 7-Way trailer connector, **is not providing power.**



- i. Verify that the connector is properly inserted into the receptacle of the tow plug.
- ii. On newer model vehicles, ensure that your vehicle recognizes that a trailer is connected to it. You may need to press the brake for a couple of seconds for the vehicle to activate this function. Otherwise, consult your vehicle manual to see how the auxiliary power in the tow plug should be activated.
- iii. Verify that the fuses related to the tow plug have not been tripped.
- iv. Verify if you have current coming out of the tow plug with a test light or a voltmeter. Connect either one of those instruments to the auxiliary current pin and the ground pin in the tow plug on your vehicle.
  - o If the light goes on or if you read about 12V or more on the voltmeter, the problem is not related to the tow plug.

- If the light does not go on or you do not have 12V on the voltmeter, please see your dealer for inspection.

**B. The 7-Way trailer connector is **not properly grounded**.**

- i. The 7-Way trailer connector needs to be properly grounded for the auxiliary current to work. Make sure that there is no oxidation on any of the tow plug pins.
- ii. If you have a secondary ground on the trailer, make sure that the surface is properly cleaned and without any oxidation.

**2. The trailer is not moving**

A. The trailer function is not going up or down and the red LED light on the NovaPeak is on.

- i. The voltage on the NovaPeak is too low, it needs to charge to at least 12V.

**3. Other**

A. The red **LED light is on** during use.

- i. The voltage on the NovaPeak is too low, it needs to be recharged to at least 12V.

B. The fuse on your vehicle keeps blowing up

- i. The voltage on the NovaPeak is too low and the vehicle does not regulate the current output. Charge the NovaPeak with an independent charger at 7.5A or lower.

## WARRANTY

All NovaPeak from Eagle Hydraulic are warranted free from defective parts, workmanship and/or assembly errors for five (5) years from the date of manufacturing.

The NovaPeak is supplied with a model number and a serial number. Please make sure you have this information on hand when calling. A NovaPeak without the model number and/or serial number will **NOT** be covered under warranty. Any disassembly or modification made on a NovaPeak will automatically **VOID** the warranty.

Eagle Hydraulic stands behind their products. All our NovaPeak are tested and verified before shipping. Therefore, any signs of improper application will void the warranty.

If you have verified all the above information in the symptoms and solutions troubleshooting guide, and still have a problem with your NovaPeak, please consult with Eagle Hydraulic technical department for advice and support.

All NovaPeak returns must be authorized by Eagle Hydraulic and must be accompanied by an RGA number.

If you need to send your NovaPeak back, please make sure that both terminals are correctly protected.

Please contact our customer service at 1-877-382-2850 for additional information.



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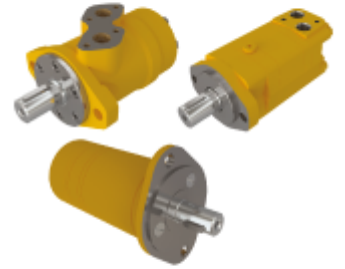
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