

## Replacing a MagneTek or Parallax 3200 Series System.

3200 Series Linear converter/chargers were manufactured with several different options available and **option codes** after the model number were used to identify these different configurations.

Example: **32 40 PX**

Series      DC amperage output      Options

### 3200 Series

Model	Wt.	W	H	D
3215	9¼	5½	4¼	10
3220	15	7¼	6	12
3230	17	7¼	6	13%
3240	18	7¼	6	13%

### Options

Code	Description
C	6 Amp Battery Charger
B	6-3 12-Volt Fuse Block
P	12-Volt Pigtail
T	6-1 12-Volt Fuse Block
X	36" 120-Volt Cord Set

### 3200 Series Deck Mount Converters

Model Number	12 VDC Output Rating	120 VAC Input Rating	Converter Switching	Battery Charger	Listing
3215	15 Amp	2.3 Amp	Manual	Not Available	UL
3220	20 Amp	3.5 Amp	Automatic	Optional	UL/CSA
3230	30 Amp	5.0 Amp	Automatic	Optional	UL/CSA
3240	40 Amp	7.0 Amp	Automatic	Optional	UL/CSA

Later production units (out to the end of production) reduced available options to basically two, option **P** and option **X**.

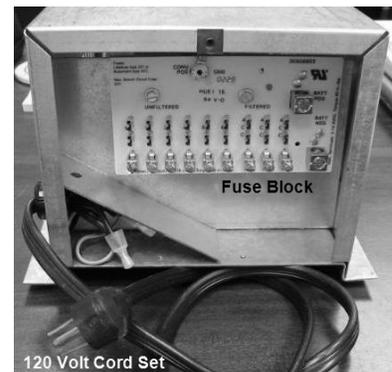
The two questions that need to be answered about a 3200 series converter/charger requiring replacement are:

1. Does it have the internal Fuse Block? Option B or T
2. Does it have the 120-Volt Cord Set? Option X

**The recommended replacement for any 3200 Series converter/charger is a Parallax Power Supply 7400 series deck mount converter/charger.**

<http://www.parallaxpower.com/7400/7400productbrochure.pdf>

Choose an appropriate DC amperage output comparable to the original 3200 series DC output amperage. Installing a 7400 series with a higher DC amperage output is acceptable, but be aware that this may also require upgrading the battery bank wiring and the battery over-current protection fuse or breaker to prevent nuisance battery breaker tripping. Upgrading the battery wiring and battery over-current protection is recommended when increasing the DC amperage



capacity of the new converter and would be required to safely carry the additional amperage the battery may require during battery recharging. For #8 AWG minimum with a 90 degree Celsius insulation rating a 50-55-ampere maximum battery breaker or fuse is appropriate. **Note- Parallax Power does not recommend installing a model 7465 if the RV is equipped with 30 ampere AC input service due to the 30 ampere AC maximum input current limitation.**

## DC Wiring

If the 3200 series converter/charger **has** an internal DC Fuse Block (option B or T), You will also need to install an FB series external DC Fuse Panel (see photo to right). The FB series Fuse Panel is required because a 7400 series does not contain an internal DC Fuse Panel. It is not safe to mount the 3200 series internal Fuse Block in any location external of the original mounting location in the 3200 series.



FB Series Fuse Panel

A “typical connection diagram” for 12-volt DC system interconnections utilizing a 7400 series and an FB series Fuse Panel is included as part of the document referenced by the link below.

Use the “typical connection diagram” to move circuit connections from the old 3200 series Fuse Block to the new FB series DC Fuse Panel.

[http://www.parallaxpower.com/Dist\\_Panl/FB%20Series.pdf](http://www.parallaxpower.com/Dist_Panl/FB%20Series.pdf)

If the 3200 series converter/charger **did not** have the internal Fuse Panel proceed as follows:

1. The 3200 series wiring has a blue “converter output” and a red “charger output” (or red “battery” connection for models 3215/3215UL). Connect any wiring that was connected to these red and blue leads together and connect them to the positive DC output terminal on the 7400 series.
2. Any wiring connected to the white DC negative lead of the 3200 series will be connected to the DC negative output terminal of the new 7400 series converter/charger.
3. Remove the AC bonding conductor from the 3200 series bonding conductor lug and connect it to the 7400 series bonding conductor lug on the side of the 7400 series unit.

## AC Wiring

The 7400 series converter has a 120 volt Cord Set and requires a 15 ampere 120VAC supply circuit for the cord set to plug in to.

If the 3200 Series **does not** have the 120-volt Cord Set (option X) and was “hardwired” to the AC breaker panel for the 120 VAC supply, have the technician or electrician install a 120VAC receptacle and outlet box appropriately rated for the amperage rating of the “Romex” or supply wiring it will be connected to. The AC circuit breaker amperage rating protecting the supply wiring must also be appropriate for the amperage rating of the supply wiring used.

Date of Publication 07/27/2006      Rev A

All information, drawings, flowcharts, and schematics are the property of Parallax Power Supply L.L.C. All rights reserved. Service or installation information provided solely for use by Licensed Electricians and Certified RV Technicians. **Refer installation and servicing to qualified service personnel.** No endorsement of technical expertise, arising from the use of the information supplied is either expressed or implied. Information believed to be accurate at the time of publication.