Troubleshooting

Please review these 4 simple steps below and follow the troubleshooting tips that apply to your situation before submitting a warranty claim.

- 1. Power source issues frequently are the cause of non-performance.

 Please check your surge protector at two or more different power sources or pedestals to confirm power is being supplied.
- 2. **If you are located at a campsite...** please contact the park manager to verify there is correct power at the pedestal.
- 3. If you are parked at a residence... you may need to contact an electrician to confirm power source service. 15-amp service will provide very limited power, a stronger power source is recommended for adequate power and appliance operation and protection within your RV
- 4. Confirm that the surge protection unit is connected directly to the power source... not through a non- RV approved adapter or extension cord.

Plugging In...

Damage NOT COVERED Under Our Lifetime Warranty Policy



Plugging In...

A poor connection is typically due to old, dirty or poorly maintained plugs, adapters and/or prongs/blades. Before plugging in ensure your plug is clean and there is no pitting and/or discoloration on the pin/prong or blades. This will help safeguard the connection.

You can always give the prong/blades a gentle clean with an emery cloth.



A poor connection forces the voltage to arc creating extreme heat which can result in extreme melting.





Damage not covered under our warranty include:

- 1. Pigtail showing excessive heat/melting damage (see image 8)
- 2. Front receptacle showing excessive heat/melting damage (see image 6)
- 3. Plug/blades showing pitting and/or excessive heat/melting damage (see images 3, 4 & 5)
- 4. Damage caused by the external plug or cord (see image 7)

Damage not covered under our warranty include:

A poor connection is typically due to old, dirty, or poorly maintained plugs, adapters and/or prongs/blades. Before plugging in ensure your plug is clean and there is no pitting and/or discoloration on the pin/prong or blades. This will help safeguard the connection.

You can always give the prong/blades a gentle clean with an emery cloth.

Error Code Troubleshooting:

If this is a new unit and/or a new installation and you receive any of the errors below, please contact Progressive Industries Technical Support before filling out the warranty form or returning the product to the original point of purchase. If this is not a new unit or new installation and you are receiving an error code, please reference the information below before contacting Progressive Industries Technical Support.

Error Code	Description ↑↓	Troubleshooting steps	If error code remains ↑↓
E0	Unit is functioning properly	None	No action required
E1	Reverse Polarity	1. Plug RV into a pedestal at a different location. 2. If error code reads "E0", contact park manager to notify them of a fault at the original pedestal.	Fill out the online warranty form for a replacement unit.
E10	Surge Occurrence	None	The unit has protected your RV from a surge event and is not covered under warranty. This unit will continue to provide error code information but will not protect your RV from future surge events.
E2	Open Ground	1. Plug RV into a pedestal at a different location. 2. If error code reads "E0", contact park manager to notify them of a fault at the original pedestal.	Note: If plugged into a generator, read generator information located below for more information. 1. Fill out the online warranty form for a replacement unit.
E3	Line 1 High Voltage	1. Plug RV into a pedestal at a different location. 2. If error code reads "E0", contact park manager to notify them of a fault at the original pedestal.	Verify pedestal voltage with a multi-meter or contact an electrician to verify the voltage. 2. If voltage reading is below 132 volts, fill out the online warranty form for a replacement unit.
E4	Line 1 Low Voltage	1. Plug RV into a pedestal at a different location. 2. If error code reads "E0", contact park manager to notify them of a fault at the original pedestal.	1. Verify pedestal voltage with a multi-meter or contact an electrician to verify the voltage. Note: If the voltage is low such as 108 or 110, it may be quickly pulled down by a large load such as a water heater or an air conditioning unit. This still indicates low power at the pedestal. 2. If voltage reading is above 104 volt and stable, fill out the online warranty form for a replacement unit."
E5	Line 2 High Voltage	1. Plug RV into a pedestal at a different location. 2. If error code reads "E0", contact park manager to notify them of a fault at the original pedestal.	Verify pedestal voltage with a multi-meter or contact an electrician to verify the voltage. 2. If voltage reading is below 132 volts, fill out the online warranty form for a replacement unit
E6	Line 2 Low Voltage	1. Plug RV into a pedestal at a different location. 2. If error code reads "E0", contact park manager to notify them of a fault at the original pedestal.	1. Verify pedestal voltage with a multi-meter or contact an electrician to verify the voltage. Note: If the voltage is low such as 108 or 110, it may be quickly pulled down by a large load such as a water heater or an air conditioning unit. This still indicates low power at the pedestal. 2. If voltage reading is above 104 volt and stable, fill out the online warranty form for a replacement unit.
E7	Line Frequency High	1. Plug RV into a pedestal at a different location. 2. If error code reads "E0", contact park manager to notify them of a fault at the original pedestal.	Note: If the error code occurs only at dawn and dusk it may be due to motion sensing lights. Neon lights connected on the same electrical circuit may cause a frequency error code. 1. Fill out the online warranty form for a replacement unit.
E8	Data Link Down	None	Fill out warranty form for item EMS-RDS to receive a replacement display and cable. 2. If replacement screen displays the E9 error code, fill out warranty form for a replacement unit

E9	Data Link Down	None	Fill out warranty form for item EMS-RDS to receive a replacement display and cable. 2. If replacement screen displays the E9 error code, fill out warranty form for a
			replacement unit

Generators & Neutral Ground Connection:

If you have a Progressive industries EMS (electrical management system) surge protector installed, we recommend using a bonded neutral generator. If your generator is not neutral grounded, you can find articles on multiple sites detailing ways to properly bond a generator.

NOTE: We no longer offer a generator plug to resolve this issue.

Low Voltage:

When connecting a 30A or 50A RV to household outlets, power may cut in and out while displaying an E0 error code. The issue is that the household outlets are rated for 15A, so they do not consistently supply over 104V in certain circumstances, leading to a shutoff condition on our EMS units. The larger the electrical load in the RV, the more the voltage will drop. When the load is removed the voltage increases to over 104V and the EMS unit connects, and the cycles start over.

Below is little more information regarding volts, watts, and amperages for your reference.

Your coach and its appliances use power (Watts) to perform work. The formula for Power is Volts (V) x Amps (A) = Watts (W).

50A Coach (NORMAL OPERATION)

120V x 100A = 12,000 watts (Since a 50A coach has two 120 v lines, that equals 12000 watts or 12 KW [Kilowatts])

30A Coach (NORMAL OPERATION) 120V x 30A = 3,600 watts (3.6 KW)

 $120V \times 15A = 1,800$ watts (1.8 KW or 15% of the coach's consumption or 1.8 KW)

Corrosion:

To help you protect you, your RV, and your portable unit we recommend you take preventative measures before connecting your portable unit to the pedestal and/or electrical power. Always ensure the blades on the pigtail are not discolored, do not have any pitting, are not dirty and are free from moisture. In the event you see these indications, take a moment to clean the blades. Also make sure you always have a good snug connection that is cool to the touch. You can always give the blades a gentle clean with an emery cloth.

Adapters:

Adapters can be used with surge protectors without any impact on the surge protection functionality. If using an adapter from a 30A power source to a 50A surge protector, please note that only your 120V devices will function while plugged into the power source. If using an adapter from a 30A power source to a 50A EMS surge protector, please note that your two-line readings for voltage will be also be identical.