

The Battery Isolation Manager isolates the two battery systems, Chassis & Coach, in a Motorhome. This prevents loads in one system from discharging both. It also connects the two battery systems together during charging. Both batteries are charged if either is being charged. The Coach Battery is charged while driving down the road, and the Chassis Battery is charged while plugged into Shore Power at a camp ground.

Key Features:

- 1. Integral to Isolator Relay
  - a. 160 & 225 amp continuous models
  - b. Waterproof
    - IEC 60529, IP66 IP67,
    - ASTM B 117 96 Hours Salt Spray
  - c. Approved for Battery Compartments
- 2. Microprocessor based
  - a. Monitors battery state over longer periods of time
  - b. Not just simply voltage dependent
- 3. Charges
  - a. Coach Battery from Alternator
  - b. Chassis Battery from Coach Charger
- 4. Isolates Batteries to prevent discharging or overcharging of Batteries
- 5. Prevents
  - a. Equalization cycles from Damaging Chassis Battery
  - b. Annoying clicking of Isolator Relay
  - c. Overcharging of Coach Battery during long drives
  - d. Overcharging of Chassis Battery
  - e. Generator/Charger & Alternator Interference
- 6. Provides Emergency Start with Dash Switch
- 7. Runs Cooler using Less Power
  - a. 100°F cooler than competition
  - b. Uses only 4Watts of power versus 25W

225amp

00-10021-000

160amp

M 20 IN-LBS

BATTERY ISOLATION MANAGER

00-10028-100

PRECISION CIRCUITS INC

## **Operation:**

The BATTERY ISOLATION MANAGER (BIM) monitors the Battery Voltage of both the Chassis and Coach Batteries over long periods of time. If it senses a charging voltage, it connects the two batteries together. If the charging system is drastically overburdened, the batteries will be isolated, however, if the **BIM** sees a long term charging of both batteries it will allow the batteries to remain connected and allow the charging system to do its job. Once the battieries have reached a Float Charge state for one hour, the **BIM** will isolate the batteries to prevent overcharging, and will only reconnect the batteries for charging if one of the Battery drops to approximately 80% charge, and the other is being charged. This long term monitoring of the batteries prevents the annoying relay clicking that exists in simpler Isolation Modules today.

Specifications:				
Battery Isolation	Manager			
Part Number:	00-10021-000 00-10028-000		10028-000	
Relay Contacts:	225 Amps Continuous	160 An	160 Amps Continuous	
Dimensions:	3-3/8" 4-1/8" 4-1/8"	3-1/8	3" 2-5/8" 3-7/8"	
	wide high deep	wide	e high deep	
Mounting Holes	Two 1/4" wide slots			
Connections	Coach & Chassis Battery	5/16" Rin	g Terminal	
	Generator & Ignition	1/4" Faston, Quick Connect Terminal		
	Dash Switch & Ground	#10 Ring	#10 Ring Terminal	
Environment:				
Waterproof:	IEC 60529, IP66 IP67, ASTM B 117 96 Hours Salt Spray			
Dimensions:	3-3/8" wide, 4-1/8" high, 4-1/8" deep			
	Minimum	Typical	Maximum	
Volts DC	9.0VDC	12.0VDC	16.0VDC	
Ambient Temperature -40°C +85°C			+85°C	

