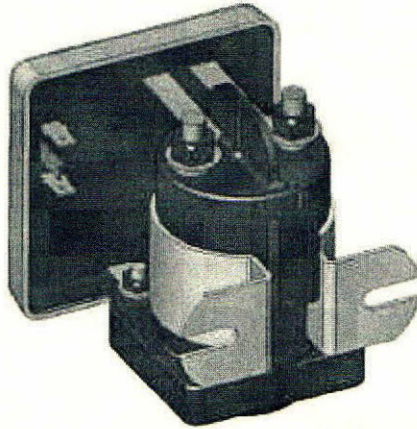


# **BATTERY SEPARATOR**

## **The Smart Solenoid**

### **MODEL 1314-200**

*This unit will activate only when the Main Battery System exceeds 13.2 volts\*.*



### **MODEL 1315-200**

*This unit will activate only when either the Main or Auxiliary Battery System exceeds 13.2 volts\*.*

The *BATTERY SEPARATOR* is designed for use in multi-battery applications as a solenoid priority system to protect the chassis charging system from excessive loading while allowing auxiliary batteries to be charged. The *BATTERY SEPARATOR* has two basic operational characteristics:

#### **ASSIST IN ENGINE STARTING**

When the starter is activated the *BATTERY SEPARATOR* compares the voltage of both battery banks. If the chassis' battery is lower than the auxiliary battery bank, the *BATTERY SEPARATOR* will engage allowing the auxiliary battery bank to aid in vehicle starting. The start signal must be at least three volts for the operation to occur.

#### **PROTECT THE CHARGING SYSTEM**

The *BATTERY SEPARATOR* monitors the battery system to determine if the batteries are being charged. When the engine or auxiliary batteries (if 1315-200 is used), or the engine batteries (if 1314-200 is used) reach 13.2 volts\*, indicating charging is taking place, the *BATTERY SEPARATOR* will engage, joining the two battery banks. If the drain on the charging system by the auxiliary or main battery bank reduces the system voltage below 12.8 volts\*, the *BATTERY SEPARATOR* will disconnect the battery banks from each other, thus protecting the respective battery banks from excessive drain.

A delay function has been incorporated in the control circuit to prevent the *BATTERY SEPARATOR* from reacting to momentary voltage fluctuations and chattering.

The priorities are to assist in engine starting, if required, and to protect the charging system from excessive power drain.

