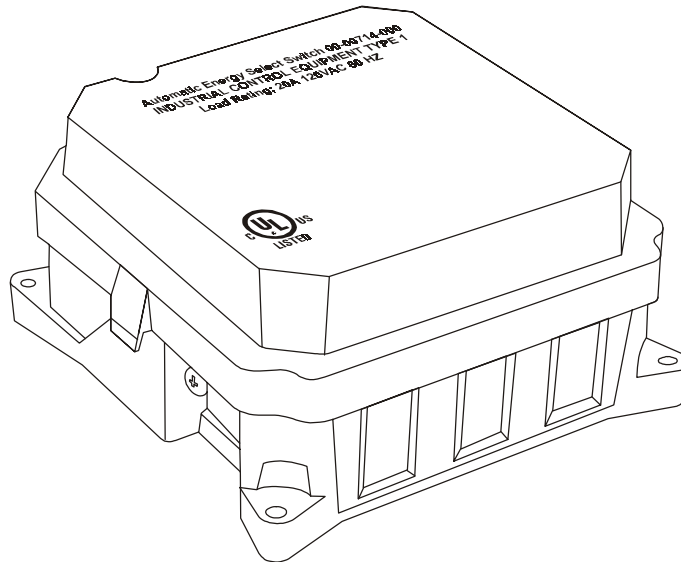


# *AUTOMATIC ENERGY SELECT SWITCH*

## **SERVICE MANUAL**



Part No. 00-00714-000

Intellitec's **Automatic Energy Select Switch (AESS)** is designed to be used in RVs to share the power available from a single circuit breaker between two large loads (up to 20 amps). The **AESS** applies power to both appliances until the primary load draws current. It then removes power from the secondary load to prevent the circuit breaker from being overloaded. This function is particularly useful for sharing power between the microwave oven and another "sheddable" or postpone-able appliances, such as the washer/dryer, or water heater. Typically, this function was performed with selector switches, forcing the owner to manually switch between the two appliances.

### **WARNING:**

The Automatic Energy Select Switch operates from shore power cord. Lethal voltages are present inside this box. Before removing the cover, be sure the coach is disconnected from shore power and the generator is not operating.

All servicing of this box should be done only by a qualified Service Technician.

*Tools required:* Line voltage test light, AC voltmeter

# **INTELLITEC**

131 EISENHOWER LANE NORTH  
LOMBARD, ILLINOIS 60148  
630-268-0010 / 1-800-251-2408

# ***AUTOMATIC ENERGY SELECT SWITCH***

## **HOW IT WORKS**

The **AUTOMATIC ENERGY SELECT SWITCH (AESS)** senses the current drawn by the primary or "on demand" load and controls the power to the secondary or "shed-able" load. When the power is initially applied, and the primary load is drawing less than 3 amps, power will be supplied to the secondary load after an initial 30 second delay. If the primary load draws more than 3 amps, power to the secondary load will be removed and held off until 30 seconds after the primary load is off.

## **SERVICING THE UNIT**

There are no serviceable components in this unit. If it is not working, replace the entire unit. To remove the cover from the unit, remove the single hex head screw at the center bottom of the cover. Before removing the screw, be sure all power is off. Gently lift the latches on either side of the cover and remove it. The connections to the unit will all be visible. (See Figure 1.) Remove all six wires from the board. The board can be removed from the box by removing the two mounting screws.

### **WARNING:**

The Automatic Energy Select Switch operates from shore power cord. Lethal voltages are present inside this box. Before removing the cover, be sure the coach is disconnected from shore power and the generator is not operating.

All servicing of this box should be done only by a qualified Service Technician.

*Tools required:* Line voltage test light, AC voltmeter

## **Hi-POT TEST:**

At the installers preference, to assure there are no potential shorts, a Hi-Pot test can be performed on the installation. To do this, the black lead from the Secondary Load must be moved to the terminal with the black lead to the primary load.

The Hi-Pot test should now be conducted in accordance with standard procedures for the tester being used. Assuming the system passes, the cover should be taken off and the lead moved back to its normal connection point. If not, the problem must be corrected before proceeding further.

***INTELLITEC***

131 EISENHOWER LANE NORTH  
LOMBARD, ILLINOIS 60148  
630-268-0010 / 1-800-251-2408

# *AUTOMATIC ENERGY SELECT SWITCH*

## **Trouble Shooting**

The Select Switch is a simple circuit which senses the current of the primary load and utilizes a relay to switch the secondary load, if the primary load draws more than 3 amps.

### **Problem**

Neither load will operate.

The secondary load will not operate.

### **Possible Cause/Solution**

The circuit breaker in the distribution box for the loads is tripped. Reset the circuit breaker.

Both loads are turned off. Check the switch settings of the loads.

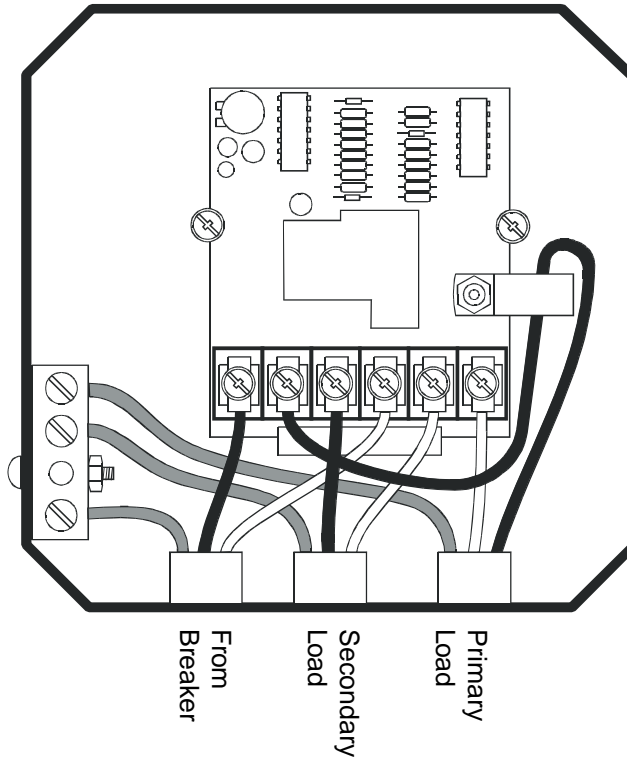
The secondary load may be turned off. Check the switch settings of the secondary load.

The AESS is defective.

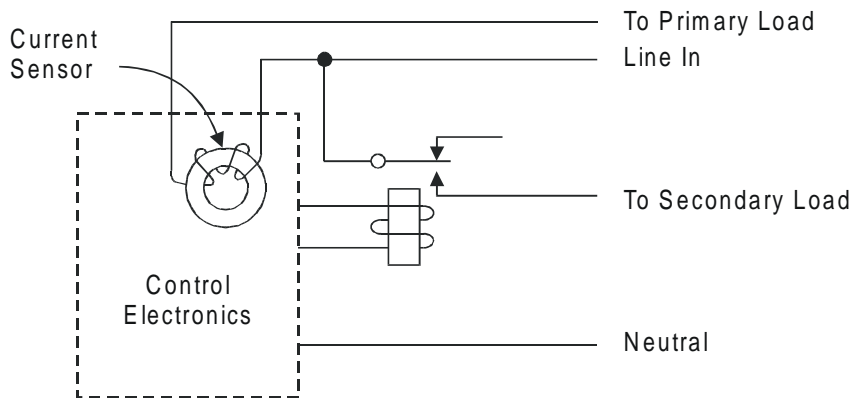
***INTELLITEC***

*131 EISENHOWER LANE NORTH  
LOMBARD, ILLINOIS 60148  
630-268-0010 / 1-800-251-2408*

# AUTOMATIC ENERGY SELECT SWITCH



View with cover removed  
Figure 1



Equivalent Circuit  
Figure 2

**INTELLITEC**

131 EISENHOWER LANE NORTH  
LOMBARD, ILLINOIS 60148  
630-268-0010 / 1-800-251-2408